Relationships between Language Teachers’ Time-management Skills, Creativity, and Burnout: A Mediation Analysis

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The present study aimed to investigate the effects of language teachers’ time management and creativity skills on their burnout levels. The sample consisted of 213 Iranian language teachers. The Maslach Burnout Inventory (MBI), Creative Behavior Inventory (CBI) and Time Management Skills Questionnaire (TMSQ) were employed for data collection. By taking a Structural Equation Modeling approach, the study proposed a model that explored the direct effects of teacher creativity on burnout level of language teachers. Additionally, the study investigated the mediating role of time management skills on the correlations between teacher creativity and burnout levels. The results revealed that the total effects of creativity on all aspects of burnout dimensions were significant; however, after the intervention of time management as a variable, the effect of depersonalization proved insignificant; and, although still significant, for the other two subscales of burnout (emotional exhaustion and depersonalization), the effect markedly decreased. Therefore, the mediation role of time management was rejected.

La présente étude porte sur les effets de la gestion du temps et la créativité des enseignants sur leurs niveaux d’épuisement. L’échantillon des participants consistait en 213 enseignants de langue iraniens. L’inventaire d’épuisement mis au point par Maslach, l’inventaire du comportement créatif et un questionnaire portant sur les compétences de gestion du temps, ont servi dans la collecte des données. Adoptant l’approche de la modélisation par équation structurelle, l’étude a proposé un modèle qui a exploré les effets directs de la créativité des enseignants de langue sur leur niveau d’épuisement. De plus, l’étude s’est penchée sur le rôle de médiateur que pourraient jouer les compétences en gestion du temps sur les corrélations entre la créativité des enseignants et les niveaux d’épuisement. Les résultats indiquent que dans leur ensemble, les effets de la créativité sur tous les aspects de l’épuisement sont significatifs; toutefois, quand on introduisait la gestion du temps comme variable, l’effet de la dépersonnalisation n’était pas significatif. Quant aux deux autres sous-échelles de l’épuisement (épuisement émotif et dépersonnalisation), l’effet a nettement diminué, tout en restant significatif. Le rôle de médiateur de la gestion du temps a donc été rejeté.
Introduction

Background

In many developing countries where English is taught as a foreign language, the majority of the language teachers are non-native speakers (NNS) of English. It is understood that teachers play a vital role in determining the success of their students (Kokinnos, 2007). Teaching has always been an emotional job; however, the nature of instruction is changing, aligned with the looming managerial systems that “rely upon fear, embarrassment and teacher guilt to gain improved student performance as demonstrated by rising standardized student test scores” (Bullough, 2009). Consequently, teaching is becoming even more stressful, intense, less personal and the curriculum more inflexible and focused on controlling teachers (Valli & Buse, 2007).

Examining factors which can affect teachers’ psychological well-being must probe into the larger paradigm of teacher burnout. Burnout is usually defined as tiredness, dullness, demoralization, dissatisfaction, incapability, or insensitivity, Burnout may result in a decrease in occupational motivation and joy of living, experienced personally because occupational conditions that require face-to-face contact and expectations of high performance from the employee (Anderson & Ivanicky, 1984; Brunsting, Sreckovic & Lane, 2014). Furthermore, Maslach (1996, 1997), one of the pioneering scholars studying burnout, has defined it as a syndrome of physical and emotional exhaustion including the development of negative job attitudes, poor professional self-concept, and low empathetic concern for clients. Accordingly, she presents the three dimensions of burnout as _emotional exhaustion_, _depersonalization_, and _reduced personal accomplishment_ (Maslach & Pines, 1977). According to Leiter and Maslach’s (1988) process model of burnout, environmental stressors such as excessive job demands may result in employees’ emotional exhaustion. Exhausted teachers normally complain about high unjust workloads, time pressures, problems with students, staff conflicts, and big-size classes—plus devaluation of their achievements (Feuerhahn, Stamov-Roßnagel, Wolfram, Bellingrath & Kudielka, 2013; Kokkinos, 2007; Näring, Vlerick & Van de Ven, 2012; Santavirta, & Solovieva, 2007).

Because the teaching profession itself requires specific skills and expertise, effective teachers in all fields of study share many common characteristics. However, language teaching has some particularities that make it distinct from other disciplines. Borg (2009) found that language teachers are seen to be distinctive from teachers of other disciplines in terms of the nature of the subject, the content of teaching, the teaching methodology, teacher-learner relationships, and contrasts between native and non-native speakers. Due to the complexities and difficulties language teachers encounter during their teaching tenure, language teacher burnout must be taken seriously; negligence in this matter may result in irreversible consequences for all people working in language teaching and learning arena—including teachers, learners and syllabus designers.

Mukundan and Khandehroo (2010) found that excessive workload has a negative impact on language teacher’s burnout level. Studies with teachers from different countries have also reported that stress and burnout of teachers are directly affected by high workload and time pressure (Bauer et al., 2006; Dick & Wagner, 2001; Goddard & Goddard, 2006; Lackritz, 2004). Additionally, the results of the EUROTEACH study (a cross-sectional multi-centered study with 2796 teachers from 13 European countries) highlighted the significance of time pressure as one of the major demands encountered by teachers (Verhoeven, Maes, Kraaij, & Joekes, 2003).
Another study undertaken by Hakanen, Bakker and Schaufeli (2006) explored the relevance of perceived workload to the burnout levels of 2038 Finnish teachers. More recently in North America Collie, Shapka, and Perry (2012) reported that workload-related stress reduced job satisfaction in 664 Canadian elementary and secondary school teachers. In general, Rudow's review (1999) concluded that workload is a major demand on teachers, which contributes to their feelings of emotional exhaustion.

In today's fast changing life and growing universal competitiveness, there is an escalating and ever-growing interest in creativity, novelty and the management of time (Baer & Oldham, 2006). Creativity is regarded as a key to personal and organizational social success; creativity signifies the production of innovative and useful ideas, and marks the starting point for change and entrepreneurship (Zampetakis & Moustakis, 2006). Time is conceptualized as a commodity that requires to be efficiently managed, and effective time management is a key indicator of organizational competitive merit (Claessens, van Eerde, Rutte, & Roe, 2007). Time is important for incubation; individuals should be provided adequate times if they are expected to do creative work (Runco, 2007). A teacher who employs time management principles can handle routine functions more effectively and efficiently, leaving more time for important educational concerns (Vannest & Hagan-Burke, 2009).

In language teaching, Maley's (1997) work has emphasized a focus on creativity through the use of texts drawn from a variety of different literary and non-literary sources that can be used to elicit creative thinking and foster the ability to make creative connections (as cited in Richards, 2013, p. 20). Many of the language tasks encouraged by contemporary language teaching methods and techniques are believed to foster creativity in learners-specifically those involving student-centered, interaction-based, and open-ended elements, and are consequently aligned with claims of supporters of establishing creative thinking and behavior on the part of learners (Richards, 2013). The paucity of evidence on the effect of creativity and time management skills on the burnout level of language teachers is the problem addressed by the present study. Based on Macan's (1994) perceived control of time model, professionals’ psychological well-being is significantly influenced by the way they manage their times. Moreover, Byrne's (1991) model of burnout introduces workload (including time pressure) as one of the factors aggravating teacher burnout. The research has shown that those teachers who manage their time efficiently are ones that are more creative (Craft, Jeffrey & Leibling, 2001; Zampetakis, Bouranta & Moustakis, 2010). The problem of this study is, then, characterized by the shortage of evidence on the nature of associations between three variables of language teachers’ creativity, time management and burnout.

By taking a Structural Equation Modeling approach-and building upon the findings of other studies in the related literature-this study proposes a model which examines the direct effects of teacher creativity and on burnout level of language teachers. Furthermore, the study examines the mediating role of time management skills on the correlations between teacher creativity and burnout levels. Correspondingly, the following research questions lead the current study:

1. Does language teachers’ creativity level have any significant effects on their burnout dimensions?

2. Do language teachers’ time management skills have any significant effects on their burnout dimensions?

3. Does the time management variable mediate the correlations between language teachers’ creativity and burnout level?
Theoretical Framework

Macan’s model of perceived control of time

Macan (1994) proposed a conceptual framework for describing the complexity of perceived time control (see Figure 1). Macan sought to explain how an individual’s perceived ability or inability to control time influences a variety of outcomes (job-induced tensions, somatic tensions, job satisfaction, and job performance).

Macan’s model suggested that these outcomes are not independent of each other, but rather are interconnected. Individuals who perceived control over their own time were found to have less emotional problems in schooling situations than those who did not perceive to control their own time (Macan, Shahani, Dipboye, & Phillips, 1990). Those individuals also reported a higher perceived performance quality and greater gratification with both their professional and private lives than those who perceived a lack of control (Macan et al., 1990). Schuler (1979) proposed that “time management means less stress for individuals, which means more efficient, satisfied, healthy employees, which in turn means more effective organizations” (p. 854). This was reflective of the traditional belief about time management; however, Macan (1994) stated that these outcomes were not necessarily related to the time management skills, and argued that the outcomes were functioning through a process of perceived control over time by the individual. In the model, perceived control over time has interactive effects with four outcomes: job induced tensions, somatic tensions (such as high blood pressure, ulcers, sleeplessness), job satisfaction, and job performance.

Byrne’s model of teacher burnout
Figure 2. Byrne’s hypothesized model of teacher burnout.

Byrne (1994, 1999) analyzed a considerable body of research on burnout to find the most cited contributors to teacher burnout. The results of her analysis indicated that burnout was caused
by organization, personality, and background factors. Based on her systematic literature review, Byrne hypothesized the model as shown in Figure 2.

Byrne's model describes five important factors concerning teacher burnout (Byrne, 1994). First, the organizational variables of role conflict, work overload, classroom climate, and decision making, and the personality variable of self-esteem, are presented as the critical agents of particular aspects of burnout for teachers. Second, the variable of support is proffered as a combination of peer and administration support. Third, the three aspects of burnout, namely, emotional exhaustion, depersonalization, and reduced personal accomplishment, are each modeled as separate constructs. Fourth, the causal pattern of role conflict and work overload differs noticeably for teachers of high school students and those teaching students at the lower grades. Finally, the variables of role ambiguity and administration support are not, supposedly, found to be causal links to burnout for the teaching staff (Byrne, 1994).

**Literature Review**

**Teacher burnout**

Williams and Burden (2000) found that depersonalization was the major threat to the success of language teachers in English Language Teaching (ELT) classrooms. As language teachers experience burnout, they develop a negative attitude towards the learners. Consequently, learners' motivation, beliefs and feelings towards the teacher and for language learning is negatively affected (Williams & Burden, 2000). Language teachers who suffer from burnout are less sympathetic toward students, have a lower tolerance for classroom disruption and feel less dedicated to their work (Coombe, 2008). Additionally, burned-out teachers develop negative feelings towards language learners and such feelings may lead to teachers’ demotivation and learners’ negative feelings towards the both the teacher and language learning. (Bryne, 1994). Ozdemir (2007) suggested that language development takes place where learners can express their ideas and emotions using the language as a tool of communication; unfortunately, teachers who are afflicted with burnout would ignore such needs.

Khandehroo and Mukandan (2010) examined the associations between language teachers' workload, age and their burnout rates. Their findings indicated that the population aged 26 to 45 are at greater risk for both emotional exhaustion and depersonalization while they are more resistant to reduced personal accomplishment. Conversely, the youngest age group of their study (EFL teachers below 25 years) suffered from emotional exhaustion and reduced personal accomplishment; however, their depersonalization was not highly reduced. The older group of teachers (above 45 years of age) were highly affected by depersonalization and reduced personal accomplishment dimensions, not by emotional exhaustion. In their research, they defined teaching workload as the amount of hours per week categorized in four groups of 10-hour intervals. Their results analysis showed that those with more than 10 hours per week wore out emotionally; however, the ones working less than 30 hours per week grappled with higher levels of both depersonalization and personal accomplishment. Based on these findings, they concluded that that emotional exhaustion is controlled by less workload; alternatively, more than 30 hours per week help teachers overcome depersonalization and reduced accomplishment.

**Teacher time management**
The popularity of time management as a research interest has vacillated since the 1970s. Current scholarly conversation about time management is again evident (Skinner & Pocock, 2008). Debates on burn-out, new laws for working conditions, and the continuous conflict over part-time work have resulted in a reawakened interest in-and re-conceptualized of-older time-management studies, as well as new studies that have been added to the literature (Rifkin, 1995).

According to Altafand and Awan (2011), recent sociologists have indicated that the way professionals view time is affected by social issues such as the institution of family, gender roles, and the amount of labor by the individual. Based on Mitchell and Samms’ (2010) definition of time management, individuals ought to first determine their needs and wants-and then rank them in terms of prominence. Faulkner et al (2007) stressed the importance of examination of the associations between perceived control over time and job satisfaction. Time management can be influenced by myriads of skills, tools, and techniques used to manage time when finishing specific tasks and projects, and to meeting objectives, and due dates. A problem, which is particular to the management of time resources, is the problem of concurrent needs that require the same resources, and cannot be accomplished simultaneously. Thus, the attainment of some of needs stifle-or procrastinate-the satisfaction of other needs (Ozmentes, 2012). Correspondingly, all education requirements are concurrent needs in reference to time resources (Sabelis, 2001). As a consequence, because they cannot be attended simultaneously, concurrent needs must be prioritized, included on a list of necessities, based upon which the available time resources may also be attended (Ozmentes, 2012).

Macan, Shahani, Dipboye, and Phillips (1990) introduced the ‘perceived control of time’ variable into time management research literature, characterized by an employee’s perception of having enough time to finish one’s work and the ability to meet one’s deadlines. To be able to keep schedules and plans in mind – and to experience strong overall feelings that one has time – are also aspects of this construct (Skinner & Pocock, 2008). Some studies have focused on perceived control of time as a predictor of job satisfaction, performance, and other indicators of well-being, including: anxiety, work strain, depression, pleasure, and health (Garhammer, 2002; Peeters & Rutte, 2005). The results are indicative that perceived control of time is a significant predictor of job satisfaction, burnout and wellbeing (Claessens, Van Eerde, Rutte, & Roe, 2004; Schwable, Hafner, Stock, & Hartmann, 2009).

Process models of time management place perceived control of time as a mediator of time management behavior on one side of a continuum, and indices of job satisfaction, burnout, and performance on the other side (Claessens et al., 2004). Time management behavior can be defined as a dynamic combination of time assessment, goal setting, planning, and monitoring activities (Claessens et al., 2007; Peeters & Rutte, 2005). The outputs of many studies are indicative the fact that: time management behavior is a predictor of perceived control of time, which at least partially mediates the relation between time management behavior and well-being as well as job satisfaction (Claessens et al., 2004). The effect of perceived control of time on performance is weaker than that on job satisfaction and well-being in process models of time management (Claessens et al., 2004).

**Teacher Creativity**

Cremin (2009) explained that creative teaching “involves teachers in making learning more interesting and effective and using imaginative approaches in the classroom” (p. 39). Creative
teaching concerns teachers' personality, personal creativity, critical thinking and its manifestations in everyday practice (Craft, 2009). Teaching for creativity “is seen to involve teachers in identifying children’s creative strengths and fostering their creativity” (Cremin, 2009, p.41), and has been a hot area of study in worldwide scientific research (Hodges, 2008). Teaching for creativity becomes functional only if teachers are willing to teach creatively—and know how to do it (Craft, 2009). There is a consensus among scholars that creative teaching has four features: relevance, ownership, control and innovation (Cremin, 2009; Hodges, 2008). The personal creativity capability of a teacher is the main proposition of creative teaching (Craft, 2009, characterized in the routine activities and practices of the teacher (Craft, 2009) that enhance the personal development of the students in spiritual, moral, social and cultural facets (Lapeniene, 2011).

Historically, there is a common belief that creativity stems from an interaction between personal and social factors (Hodges, 2008). However, not much is known about the factors that predict teachers’ creativity. Nonetheless, evidence points to work-motivation (Lapeniene, 2011), epistemological beliefs (Hong, Hartzell & Greene, 2009), the organizational climate (Lapeniene, 2010), and one’s leadership style (Mousavi, Heidary & Khamse Pour, 2011).

Sadeghi’s (2010) work furthers our understanding of creativity in education as well. He undertook a case study and focused on subscales of classroom psychological environment such as – involvement, affiliation, teacher support, task orientation, competition, order, organization, rule clarity, teacher control and innovation. Each of these subscales has been shown to have significant effects on learning of pupils. He found that the appeasing classroom environment leads to the emergence of innovative thinking and ideas, two crucial necessities for a creative classroom.

Additionally, personal factors have been suggested to be more important than social ones (Hong, Hartzell & Greene, 2009; Lapeniene, 2011) and teachers’ understandings of creativity are influenced by the context wherein they work and live (Pruit, 1989). Tan and Majid (2011) reported that in the context of art teachers in Singapore, there were positive correlations between creativity self-efficacy and creative personalities.

Research also suggests the importance of teaching roles in developing creativity. Karakelle (2009) concluded that flexible and fluent thinking skills-two important elements in diverge thinking-can be facilitated through drama processes. Positive emotions also support divergent patterns of thinking, suggesting that experiencing positive emotions will increase creativity and support a creative mindset over a lifetime (Tan & Majid, 2011). Furthermore, research conducted by Ritter, Polnick, Fink and Oescher (2010 argued that leadership of the classroom was one of the most significant pillars of a creative class. Accordingly, the teacher plays a key role in inclusion and development of creativity in classroom.

Methodology

Participants

The sample consisted of 213 Iranian EFL teachers in the cities of Tehran, Kerman, Yazd, Shiraz and Tabriz. Their teaching experience period ranged from 3 to 11 years. There was a relatively balanced gender mix—99 males (46.47%) and 114 females (53.53%). Their age ranged from 31 to 42 (M = 38.14, SD = 1.23). All participants were English Language Teaching graduates holding either graduate or undergraduate degrees in Teaching English as a Foreign Language (TEFL).
Participant selection was based on mixed/multi-stage random sampling: first, quota sampling was used wherein assembled sample had approximately the same proportion of participants with respect to the variable of gender; second, accidental or convenience sampling technique was used based on the accessibility and proximity of participants to the researcher.

**Instruments**

Three measurement instruments were used in this study: (1) the Maslach Burnout Inventory (MBI); (2) the Creative Behavior/Activity Experience: Creative Behavior Inventory (CBI); and (3) the Time Management Skills Questionnaire (TMSQ).

**Maslach Burnout Inventory (MBI).** The English version of the Maslach Burnout Inventory (MBI) was used to measure the burnout level of the participants (Maslach, Jackson, & Leiter, 1996). This test included 22 items and intended to measure three elements of burnout: emotional exhaustion, depersonalization, and personal accomplishment. Many meta-analyses for reliability generalizations have indicated the Alpha Cronbach reliability of the inventory to be more than 0.75 (e.g., OH & Lee, 2009; Richardsen & Martinussen, 2005). Items were scored on a seven-point Likert scale from 0 to 6, with 0 being ‘never’ and 6 being ‘every day.’ A minimum possible sum score on all subscales was 0 with a maximum possible sum score of 54 on the subscale of emotional exhaustion, 30 on depersonalization, and 48 on personal accomplishment. Higher scores on the emotional exhaustion and depersonalization subscales indicated being negatively affected in those areas of burnout, while lower scores in personal accomplishment indicated being negatively affected in that area of burnout. Reliability coefficients listed in the MBI manual (Maslach, Jackson, & Leiter, 1996) indicated scores of 0.90 for the emotional exhaustion subscale, 0.79 for depersonalization, and 0.71 for personal accomplishment (n= 1,316). The MBI was chosen for the current study because it is efficient, well represented in the research literature (Schaufeli & Enzmann, 1998), and has been validated with a large number of human service sector employees, including teachers (Maslach, Jackson, & Leiter, 1996).

**Creative Behavior/Activity Experience: Creative Behavior Inventory (CBI).** The short-form of the Creative Behavior Inventory (Dollinger, 2011) based on Hocevar’s CBI measurement (Hocevar, 1980) was adapted to measure participants’ previous experiences that are seen as creativity-related. The original 90-item scale that included six subscales identified as-visual arts, crafts, literature, music, performing arts, and mathematics/science, while the short-form of the CBI was developed in a 28-item scale and included items regarding visual arts, craft, literacy, performing arts, and other creative activities. Because the original inventory of the CBI contains an unsolicited and high-level achievement of creative behavior (such as having published a literary work, having recorded a music record or CD, and having written an original computer program), the short-form of the CBI reduced these infrequent and high-level achievement items by selecting items with common creative behavior, which excluded some items from each variable and all of music and mathematics/science related items (Dollinger, 2003). Due to these changes, some researchers have referred to the short-form of the CBI as “everyday creativity” while the long-form of the CBI has been referred to as both “everyday creativity” and “eminent creative accomplishment” (Silvia, Wigert, Reiter-Palmon, & Kaufman, 2012, p. 21). Moreover, the 28-item version of the CBI measurement does not have subscales. Thus, the researchers used participants’ total score of all 28 items as their predictive value of the CBI. The original 90-item CBI reported that internal consistency reliability ranged from 0.63 to
0.89 while the short-form 28-item of the CBI yielded a coefficient alpha of 0.88 (Silvia, Wigert, Reiter-Palmon, & Kaufman, 2012).

**Time Management Skills Questionnaire (TMSQ).** The TMSQ was developed by Britton and Tesser (1991) and included items on attitudes towards time management and planning the allocation of time. The scale includes three sub-scales factors, namely short-range planning, long-range planning, time attitudes, and time management behavior of participant students. The adapted questionnaire embodied 7 items in the Short-Range Planning (SRP) dimension, 6 items in the Time Attitudes (TA) dimension and 5 items in the Long-Range Planning (LRP) dimension. The total time management questionnaire consisted of 18 items, each answered on a 5-point scale including the responses always (5), frequently (4), sometimes (3), infrequently (2), and never (1). Each scale item had five response categories: always, frequently, sometimes, infrequently and never. These were scored from 1 to 5 with a high score indicating a positive attempt at managing time. The response, always was scored as 1 for items 8, 10, 12 and 15 and as 5 for the remainder of the items. The range of possible scores was18-90 on the 18-item total Time Management Scale; 7-35 on the Short Range Planning sub-scale; 6-30 on the Time Attitudes sub-scale; and 5-25 on the Long Range Planning subscale. Higher values on the scale corresponded to better time management practices. In the current study, Cronbach’s alpha for (TMQ) was 0.80. Cronbach’s alpha values for the subscales were 0.82 (LRP), 0.79 (TA) and 0.80 (LRP). Table 1 provides the descriptive statistics of the results (standard deviations and mean scores).

**Preliminary Results**

Table 2 indicates the correlational matrix providing the relationships between variables. Table 2 shows (as expected) the correlations between time management questionnaire subscales are all significant (correlations > 0.90 for all subscales). Creativity had the most significant correlations with the time attitude subscale of time management scale (α = 0.48). However, the correlations between the creativity variable and other subscales of time management scale were comparatively close with α = 0.46 for total time management, α = 0.41 for long range planning and α = 0.45 for short range planning.

With regard to the correlations between creativity and burnout subscales, the most significant relationship was found for the reduced accomplishment variable (α = 0.77). Creativity also had a significant correlation with the other two dimensions of burnout (α = -0.19 for depersonalization, and α= -0.47 for emotional exhaustion).

An overview of the results for the correlations between time management subscales and burnout dimensions can be summarized as follows- total time management had a significant relationship with reduced accomplishment and emotional exhaustion variables producing α value of 0.52 and -0.36 respectively. Nevertheless, the correlation is insignificant for depersonalization variable at α = -.029 level. The case is also true with the correlations between depersonalizations and other time management subscales including short range planning (α = -0.021), long range planning (α = .001) and time attitude (α = -.066). Emotional exhaustion had a significant correlation with all subscales of time management with very close α levels ranging from 0.34 to 0.36. Finally, reduced accomplishment had a significant correlation with all subscales of time management with very close α levels ranging from 0.48 to 0.52.
Direct, Total, and Indirect Effects

**Direct Effects.** The direct effect of creativity on burnout dimensions were: \( \beta = 0.61 \) for reduced accomplishment; \( \beta = 0.7 \) for depersonalization and \( \beta = -0.34 \) for emotional exhaustion. These results are depicted in Figure 3. Using Structural Equation Modeling (SEM), the magnitude and significance of exogenous and endogenous variables were assessed. Using SEM (instead of regression analysis) was advantageous as it allowed simultaneous testing for direct, indirect, and total effects (Kline, 1998). The AMOS software procedure was used for the *maximum likelihood estimation* of the parameters of the model.

The strongest effect, as indicated in Figure 3, was the effect of creativity on the reduced accomplishment of teachers—and the least effect was observed on the depersonalization dimension of burnout. However, all the effects were significant at the 0.05 level.

Table 1

*Standard Deviations and Mean Scores of the Variables*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>29.28</td>
<td>15.77</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>16.92</td>
<td>6.07</td>
</tr>
<tr>
<td>Reduced Accomplishment</td>
<td>23.28</td>
<td>15.57</td>
</tr>
<tr>
<td>Creativity</td>
<td>12.79</td>
<td>7.31</td>
</tr>
<tr>
<td>Short Range Planning</td>
<td>18.13</td>
<td>11.38</td>
</tr>
<tr>
<td>Long Range Planning</td>
<td>12.93</td>
<td>7.37</td>
</tr>
<tr>
<td>Time Attitude</td>
<td>13.61</td>
<td>6.73</td>
</tr>
<tr>
<td>Total Time Management</td>
<td>44.73</td>
<td>25.09</td>
</tr>
</tbody>
</table>

Table 2

*Correlations Matrix*

<table>
<thead>
<tr>
<th></th>
<th>Total Time Management</th>
<th>Time Attitude</th>
<th>Long Range Planning</th>
<th>Short Range Planning</th>
<th>Creativity</th>
<th>Reduced Accomplishment</th>
<th>Depersonalization</th>
<th>Emotional Exhaustion</th>
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<tr>
<td>Total Time Management</td>
<td>.97**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Attitude</td>
<td></td>
<td>.97**</td>
<td>.92**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Range Planning</td>
<td>.97**</td>
<td>.92**</td>
<td>.95**</td>
<td>.95**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Range Planning</td>
<td>.99**</td>
<td>.95**</td>
<td>.95**</td>
<td>.95**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>.46**</td>
<td>.48**</td>
<td>.41**</td>
<td>.45**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced Accomplishment</td>
<td>.52**</td>
<td>.54**</td>
<td>.48**</td>
<td>.51**</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depersonalization</td>
<td>-.029</td>
<td>-.066</td>
<td>.001</td>
<td>-.021</td>
<td>-.19**</td>
<td>-.34**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>-.36**</td>
<td>-.37**</td>
<td>-.34**</td>
<td>-.36**</td>
<td>-.47**</td>
<td>-.58**</td>
<td>-.046</td>
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</tr>
</tbody>
</table>

**Correlation is significant at 0.05 level.**
The Bentler Comparative Fit Index (BCFI) valued 0.91. According to Bentler and Bonett (1980) a value between .90 and .95 is considered marginal and above .95 is considered to be a good fitting model. The Standardized RMSR (SRMSR) valued 0.01. According to Byrne (2013), well-fitting models would obtain values less than 0.05. Finally, the Hoelter’s index valued 83. Hoetler (1983) considers values more than 70 indicator of acceptable fit; however, the Hoelter index in the present model very narrowly exceeds the cut-off point. The overall consideration of the fit indices of the model suggested the model is fit.

**Total Effects.** Table 3 provides the total effects in the hypothesized mediational model. Figure 4 depicts the path coefficients for the total effects for all the variables in the proposed model. According to Kline (2011), the SEM is of two types: (1) the measurement model, which relates measured variables to latent variables, and (2) the structural model, which relates latent variables to one another. The present study utilized a structural model for specification of relationships between the latent variables within the hypothetical model.

**Table 3**  

*Beta Coefficients for Total Effects*

<table>
<thead>
<tr>
<th></th>
<th>Creativity</th>
<th>Total Time Management</th>
<th>Time Attitude</th>
<th>Long Range Planning</th>
<th>Short Range Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Time Management</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Time Attitude</td>
<td>.48</td>
<td></td>
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<tr>
<td>Long Range Planning</td>
<td>.41</td>
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<tr>
<td>Short Range Planning</td>
<td>.45</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Reduced Accomplishment</td>
<td>.71</td>
<td>.29</td>
<td>.33</td>
<td>.17</td>
<td>.009*</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>-.07</td>
<td>-.83</td>
<td>-.045*</td>
<td>-.33</td>
<td>-.49</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>-.42</td>
<td>-.47</td>
<td>-.035*</td>
<td>-.050*</td>
<td>-.21</td>
</tr>
</tbody>
</table>
As Figure 4 illustrates, most of the paths are significant at the 0.05 level. However, the following effects were found to be statistically insignificant at the 0.05 level: the effects of time attitude on emotional exhaustion and depersonalization; the effects of short-range planning on the reduced accomplishment and the effects of long-range planning on emotional exhaustion. Nonetheless, the overall effect of time management skills turned out to be significant on all three aspects of burnout. The models produced by AMOS make no provision for measurement error. Then, the indicators are treated as perfect measures of their respective latent variables. List-wise deletion was used for the treatment of the missing data; cases were deleted from the sample if they have missing data on any of the variables in the analysis to be conducted.

**Indirect Effects.** The examination of the mediating effect of time management on burnout dimensions was conducted after the analysis of total effects and indirect effects. Table 4 shows the indirect effect of creativity on burnout levels after the inclusion of time management as the mediating variable.

*Figure 4. The path coefficients for the total effects.*

*Note.* Dotted line shows insignificant effects. *P< 0.05*
As Table 4 indicates, the indirect effect of creativity on depersonalization after the intervention of time management variable was insignificant ($\beta=.001$). Moreover, the indirect effects for reduced accomplishment and emotional exhaustion were both significant and approximately close: for reduced accomplishment $\beta=.097$, and for emotional exhaustion $\beta=-.080$. In summary, the total effects of creativity on all aspects of burnout dimensions were significant; however, after the intervention of time management variable, the effect for depersonalization became insignificant and for other two, though still significant, drastically decreased. Therefore, the mediation role is rejected. The next section provides the model fitness summary.

**Model Fitness Summary**

Given the inordinate number of fit indices, it becomes a temptation to report those fit indices that indicate the best fit (Barret, 2007); however, it has been strongly recommended to avoid this (Kenny & McCoach, 2003; Kline, 2011). With regard to the model fitness, relatively mixed responses were received. The Bentler Comparative Fit Index (BCFI) valued 0.8907; according to Bentler and Bonett (1980) a value between .90 and .95 is considered marginal and above .95 is considered to be a good fitting model. The Standardized RMSR (SRMSR) valued 0.1114; according to Byrne (2013), well-fitting models would obtain values less than 0.05. The Root Mean Square Error of Approximation (RMSEA) valued .135 for the model, commonly considered a poor fit (Hu & Bentler, 1999; Kline, 2011). Finally, the Hoelter’s Index valued 77; Hoetler (1983) considers values more than 70 indicator of acceptable fit; however, the Hoetler index in the present model very narrowly exceeds the cut-off point. Based on the all fit indices for this model, the overall implication is that the model is poor fitting.

**Discussion**

Teachers are often overwhelmed with their responsibilities—and a primary concern with teachers is a lack of time (Vannest & Hagan-Burke, 2009; Warnick, Thompson, & Tarpley, 2006). Chapman and Hutcheson (1982) found that teachers who were less capable of organizing their time were more likely to leave their profession, and teachers who leave the profession often cited excessive workload as a reason for their departure (Moore & Camp, 1979). Owing to rapid globalization processes – and the exponentially growing need to master foreign languages, specifically English – the work of teachers of English as a second/ foreign language has been paid more attention and the education of teachers for English as a Second/ Foreign Language (ESL/EFL) learners has been taken into consideration more contemplatively (Swaffar, 2003). The prime objective of foreign language teacher education programs is to provide teacher graduates with training in effective approaches to teaching literacy that they can use successfully.

**Table 4**

*The Standardized Indirect Effects*

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with their students for the rest of their teaching career (Swaffar, 2003). However, most EFL teachers are not adequately prepared to teach students where English is the not the mother tongue of neither the pupils nor the teachers (Cameron, 2003; Cavazos, 2009).

The present study targeted exploring the mediating effects of language teachers’ time management skills on the causal associations between their creativity skills and burnout dimensions. The study also examined the direct effects of language teacher creativity on the burnout level of teachers. The results showed that creativity had a significant effect on all three dimensions of teacher burnout, with the strongest effect on reduced accomplishment and the weakest on the depersonalization. Given that a reduced sense of personal accomplishment is a teacher’s negative self-evaluation of oneself regarding their teaching, based on findings of this study, it can be concluded that creativity is a strong predictor of reduced accomplishment among language teachers.

Landeche (2009) explored the correlations between creativity and burnout in public school classroom teachers and found that there were no significant correlations between the burnout dimensions and creativity index. Nevertheless, the greatest correlation, in his study, was between creativity and personal accomplishment dimension—consistent with the finding of this study.

Additionally, findings of this study corroborate the results of a study conducted by Schafeli et al. (2002), an attempt to examine any potential relationship between creativity and burnout. They administered Style of Creative Behavior Questionnaire, the Consequences Anticipation Test, and the Kriton Adaptation-Innovation Inventory (KAII) to business managers and found that burnout is a form of resignation, and resignation cripples creativity. They also concluded that people who were suffering from burnout were less creative. The results of the present study, however, are inconsistent with findings of Asad and Khan’s (2003) research who found that creativity and burnout levels have insignificant correlations among 72 organizational professionals in Pakistan.

Another major aim of the present research, as previously stated, was to examine the intervening the effects of language teachers’ time management skills on the causal correlations between their creativity skills and burnout aspects. The mediation analysis revealed that the intervening role of time management skills was insignificant. Moreover, the hypothetical proposed model produced poor fit indices. One explanation for this can be attributed to the fact that the current study, due to practical limitations, considered creativity as a uni-dimensional construct (measure of creative experience). Some (Cheek & Stahl, 1986, Dollinger, 2003; Hocevar, 1980; Runco, 2007) have provided evidence that creativity is a multi-dimensional psychological construct consisting of several sub-constructs. Some researchers have taken a social-personality approach to the measurement of creativity (Cheek & Stahl, 1986), suggesting personality traits such as independence of judgment, self-confidence, attraction to complexity, aesthetic orientation, and risk-taking as the measures of the creativity of individuals. However, the results of this study suggested that time management skills do not mediate the causal correlations between creativity and burnout—the effect of creativity on burnout was found to be significant.

**Limitations and Implications**

The major limitation of this study was that all variables were measured through self-reports. This poses the concern that correlations among variables were result of common method
variance. This concern is moderated by the fact that self-reports of creativity, time management behaviors and burnout dimensions have been indicated to converge with non-self-report measures (Macan, 1994). One other limitation of this study was that the researcher—due to practicality issues—was obliged to use only a uni-dimensional measure for the construct of creativity. Additionally, a final limitation was that—because of practicality issues—factors of age, gender, and teacher experience were not controlled.

The most important implication of this study is that language teacher training programs should focus more on the creativity of language teachers. As the results revealed, creativity of language teachers significantly affected their burnout levels. It should be noted that, as previously discussed, creativity of language teachers exerts major influence on the learning quality of language learners. Hence, benefits are twofold. Furthermore, time management skills of teachers had significant correlations with emotional exhaustion and reduced accomplishment aspects of burnout. This highlights the importance of teaching efficient time management skills and strategies to language teachers in teacher education programs. Thus, another implication of the present study is that language teachers should be encouraged to use time management behaviors. More research is needed to investigate the relationship between burnout and creativity in larger sample populations and taking into account other variables such as years of experience and age. Other creativity tests should also be implemented to augment this construct validity of the creativity measurement. Moreover, a longitudinal approach to studying creativity and burnout would be illuminating. Other variables of interest to add to future research could be job satisfaction and self-efficacy. While adequate to serve the purpose of this study, the sample was homogeneous with all the participants being language teachers. It is not clear if the results drawn from this sample could be generalized to other teaching staff.

**Conclusion**

In summary, the current study was undertaken to fill the gap in the literature by examining the nature of associations between three variables of language teachers’ creativity, time management and burnout. Implementing Structural Equation Modeling approach—and building upon the findings of other studies in the related literature—the study proposed a model for investigation of the direct effects of teacher creativity and on burnout level of language teachers. Furthermore, the study explored the mediating role of time management skills on the correlations between teacher creativity and burnout levels. The total effects of creativity on all aspects of burnout dimensions were found to be significant; however, after the intervention of time management variable, the effect for depersonalization became insignificant and for other two, though still significant, drastically decreased. Therefore, the mediation role of time management was rejected.

**References**


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Masoud Mahmoodi-Shahrebabki got his BA in English Literature from the University of Tabriz. He got his MA in TEFL from the University of Tehran in 2015. His research areas include: Language Teacher Education, Reading, and Creative Teaching.