

# Does job value boost self-efficacy and protect against burnout among teachers in Oman?

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**Oman**

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## Abstract

**Introduction.** The purpose of this study was to examine if the perception of teaching value and a teacher's self-efficacy (SE) are related to burnout. Previous research has shown a strong relation between teachers SE and burnout. Rarely, however, job value has been included in any of the previous studies.

**Method.** A stratified random sample (N =2446) of Omani teachers was drawn. Three measures: Job value, Maslach burnout inventory (MBI) and the teachers' sense of efficacy scale (TSES) were used. Confirmatory factor analysis was performed to test the proposed factor structure of the measures as well as the proposed structural model.

**Results.** The invariance tests proved that the structure of constructs and the relations between constructs were invariant across gender. Job value significantly related to both SE and burnout dimensions. Consistent with predictions, SE of student engagement related to all three burnout dimensions; whereas the other two dimensions of SE didn't relate to burnout dimensions in the expected direction. Job value and SE explained significant variances in each of the burnout dimensions.

**Discussion and Conclusion.** The results of this study highlight the importance of job value and SE of engaging students as cognitive self-regulatory mechanisms used in the stressful situations like teaching and to help control stress and burnout. Ministry of education, media and society at large should be aware of the social status of teaching and teachers and provide more respect to the teachers and their job. Such respect would improve the morale of teachers and help them become more efficacious and less exhausted.

**Keywords:** Job value; teaching self-efficacy; burnout; Oman

## Resumen

**Introducción.** El propósito de este estudio fue examinar si la percepción del valor de la enseñanza y la autoeficacia de un profesor están relacionadas con el agotamiento. Investigaciones anteriores han demostrado una fuerte relación entre la autoeficacia de los profesores y el agotamiento. Sin embargo, en raras ocasiones, el valor del trabajo se ha incluido en cualquiera de los estudios anteriores.

**Método.** Se extrajo una muestra aleatoria estratificada ( $N = 2446$ ) de maestros omaníes. Se utilizaron tres medidas: valor del trabajo, inventario de agotamiento de Maslach (MBI) y escala de sentido de eficacia de los maestros (TSES). Se realizó un análisis factorial confirmatorio para probar la estructura factorial propuesta de las medidas, así como el modelo estructural propuesto.

**Resultados.** Las pruebas de invariancia demostraron que la estructura de constructos y las relaciones entre constructos eran invariantes en todos los géneros. El valor del trabajo quedó relacionado significativamente con las dimensiones de SE y de agotamiento. De acuerdo con las predicciones, la SE del compromiso de los estudiantes se relaciona con las tres dimensiones de agotamiento; mientras que las otras dos dimensiones de SE no se relacionaron con las dimensiones de agotamiento en la dirección esperada. El valor del trabajo y la SE explicaron variaciones significativas en cada una de las dimensiones de agotamiento.

**Discusión y Conclusion.** Los resultados de este estudio resaltan la importancia del valor en el trabajo y la SE de involucrar a los estudiantes como mecanismos cognitivos de autorregulación utilizados en situaciones estresantes como la enseñanza y para ayudar a controlar el estrés y el agotamiento. El Ministerio de Educación, los medios de comunicación y la sociedad en general deberían conocer el estado social de la enseñanza y los maestros y brindar más respeto a los maestros y a su trabajo. Tal respeto mejoraría la moral de los docentes y los ayudaría a ser más eficaces y menos exaltados.

**Palabras clave:** Valor del trabajo; enseñanza de la autoeficacia; agotamiento; Omán

## Introduction

Teaching is probably among the most complex professions where teachers work in complicated circumstances. Teachers have to be competent in the subjects they teach and should show confidence in their knowledge of subject to their students (Alobaid, 2006). Teachers also required to work under certain terms and regulations and should adhere to the directives received from different sources such as the principal, supervisor, ministry of education, as well as the public at large (Carson, Baumgartner, Matthews, & Tsouloupas, 2010). The majority of children who attend school come from diverse cultural, intellectual and linguistic backgrounds (Abu-Hilal, 1995; Abu-Hilal & Al-Emadi, 2000). The differences among school children have imposed more pressure on teachers and made teaching more demanding. Teachers need to engage the unmotivated students as well as being creative in both designing their instruction and managing their classrooms. Certainly, these requirements put pressure on teachers.

Alobaid (2006) concluded that the role of teachers is a submissive one. She argued that teaching, unlike other more prestigious professions, is heavily constrained by conditions and terms. Alobaid (2006) stated “teachers carry major responsibilities for students across a vast age range and at crucial times in their lives - a fact of which there is insufficient public recognition” (p. 52). Alobaid also explained that teachers uniquely work and focus on two fronts: the achievement of students, and the needs of the teacher and the profession. She argued that no other profession faces this dilemma with little extrinsic reward (Alobaid, 2006). The increasing complexity of life has aggravated the dilemma teachers face (Al-Farhan, Lutfiyeh, & Al-Khawaldeh, 1982; Alobaid, 2006; Ingersoll & May, 2012; Ministry of Education, 2012; Osunde & Izevbigie, 2006). Al-Abri (2014) attributed the weak performance of Omani students in math and science in standardized international tests to low motivation among teachers who fail to motivate their students.

Social cognitive theory and social role theory are two theoretical frameworks that can be employed to understand human cognition, affect and behavior. They are two sides of one coin. As far as teaching is concerned, social cognitive theory deals with the personal and psychological aspects of the job while the social role theory deals with the social aspect of the job.

## **Theoretical Framework**

### ***Job value***

This study relies on multi theoretical frameworks such as social cognitive theory, conservation of resources theory and social role theory. Job value, like task value in the social cognitive theory (Wigfield, & Eccles, 2000) is a core component of motivation. With regards to the perception towards the social and professional importance and significance of one's job, job value can operate as a mechanism that enhances SE and alleviates stress. Researchers consider job value and positive attitudes toward the profession as important resources for teacher's effectiveness and motivation (e.g. Al-Farhan et al., 1982; Hunt & Stein, 2012; Pines & Keinan, 2005). When individuals value an activity, they become deeply engaged in it and more likely to keep working on that activity (Bandura, 1992; Wigfield & Eccles, 2000). Perceived interest or liking of the activity (intrinsic value), and perceived usefulness of the activity (utility value) are two components of job value that can lead to persistence and better performance (Bandura, 1994; Wigfield & Eccles, 2000).

Moreover, social influences have enduring effects on how teachers perceive their profession (Bandura, 1994). These influences can either promote or downgrade competencies, values and interests (Bandura, 1994). Also, the job structures a good part of teachers' lives and provides them with a major source of personal growth. Bandura (1994) argued that social persuasion is one way of strengthening teachers' beliefs. This is, social influences and persuasions represent sources for the beliefs of efficacy. In this study, job value is defined as a core of social influences and social persuasions.

### ***Self-efficacy of teaching***

Self-efficacy –as part of social cognitive theory- has been used to understand emotional health and burnout among teachers (Denton, Chaplin, & Wall, 2013; Pines, 2002; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010; Yu, Wang, Zhai, Dai, & Yang, 2015). As a cognitive motivation mechanism, SE represents the belief that teachers have toward their ability in engaging students, teaching effectively, and managing the classroom. Archambault, Janosz and Chouinard (2012) concluded that teachers need to be encouraged and supported (through social persuasion) to develop SE and positive attitudes toward teaching and students. Positive attitudes and high SE, in turn, will suppress stress and prevent emo-

tional exhaustion (Grau, Salanova, & Peiró, 2001; Pines & Keinan, 2005; Schaufeli & Salanova, 2007; Skaalvik & Skaalvik, 2010).

Bandura (1994) related self-efficacy to causal attribution, and suggested that efficacious people attribute successes or failures to efforts or insufficient efforts, respectively. However, inefficacious people attribute successes or failures to ability or low ability, respectively. As far as the attribution and responsibility are concerned, Hamady (1960) believed that the Arabs have an outlook on life that is improvident. She stated: “As a result of his determinist orientation, the Arab finds a good excuse to relegate his responsibility to external forces” (p. 187). Looking closely at instruction, classroom management, and student engagement, it can be realized that the first two kinds of skills are related to ability. If these skills are weak, the ability is implied and the self-esteem may be threatened. Causal attributions, according to Bandura (1994), affect performance and affective reactions (e.g. emotional exhaustion and cynicism). Hence, success in instruction and classroom management would enhance self-esteem while failure would threaten self-esteem. Students’ engagement might be attributed to the students, while the failure to engage students may refer to the student and/or his/her parents (externally attributed). Thus, the lack of students’ engagement may not be considered as a threat to teachers’ self-esteem because the ability is not involved.

The conservation of resources (COR) theory serves as another theoretical support for this study. The COR theory was formulated as a framework to understand stress and burnout in organizations and life in general (Hobfoll, 2001, 2011; Hobfoll, & Freedy, 1993). The theory begins with the principle that individuals strive to obtain and protect valued tangible (e.g., money, children, and property) and intangible things (e.g., self-efficacy, self-esteem, job value, and religious values) that Hobfoll (2001, 2011) called resources. Hobfoll (2011) argued that stress -and even burnout- occurs when individuals' resources are either actually lost or threatened with loss. Hence, it is argued that job value and efficacy beliefs are important social and personal resources that need to be conserved.

Social role theory, on the other hand, suggests that if someone holds a valued role, the attributes associated with the role are also related to the person and can positively impact the person's status and resources. In contrast, roles perceived with little social value and support can result in negative experiences including fewer resources and disrespect for those who hold those roles (Hunt & Stein, 2012). Hunt and Stein (2012) argued that if one has a signifi-

cant role compared to others, one will feel less marginalized and have greater self-worth and efficacy.

### ***Teacher burnout***

Burnout refers to an unpleasant psychological phenomenon caused by excessive work demands. Maslach (1978, 1981) proposed that burnout is a multidimensional construct comprised of three distinctive facets: Emotional exhaustion (EE), depersonalization and low sense of personal accomplishment. EE is the key aspect of burnout and its primary manifestation (Skaalvik & Skaalvik, 2010). EE refers to “the depletion of emotional resources, feelings of strain, and chronic fatigue” (Lheureux, Truchot, Borteyrou, & Rasclé, 2017, p. 5). Also, EE is the most widely reported and thoroughly analyzed dimension (Skaalvik & Skaalvik, 2010; Worley, Vassar, Wheeler, & Barnes, 2008). However, EE cannot fully account for the relationship that teachers have with their work. It has been recognized that depersonalization “takes into account the worker's detached response to either the service recipients or aspects of the job itself” (Worley et al., 2008, p. 800).

Depersonalization refers to the impersonal and uncaring feelings towards the students; which usually occurs as a result of EE. Also, depersonalization has been defined as a detachment from the job (Denton et al., 2013); and a defense mechanism by which the teacher places a distance from students and treats them as impersonal objects to make job demands more manageable (Worley et al., 2008). The job component of depersonalization has been overlooked in the literature. However, back in the 80s of the last century, Iwaniki and Schwab (1981) pointed that the depersonalization has two distinct components: one for the student, and one for the job. Abu-Hilal and colleagues (e.g., Abu-Hilal & Salameh, 1992; Abu-Hilal & Al-Emadi, 2000) failed to consistently extract one clear factor for depersonalization. The question remains whether the items that measure depersonalization make one or two factors (Iwaniki & Schwab, 1981).

As the personal accomplishment is defined as a sense of high self-efficacy and feelings of competence (Bandura, 1994; Denton et al., 2013; Maslach, Jackson, & Leiter, 1996), this dimension has been excluded from the design of the study to avoid any overlaps with SE fearing that it may distort the relations of SE with the other burnout constructs (for justification, see Skaalvik and Skaalvik, 2010). Fernet, Lavigne, Vallerand, & Austin, (2014) labled

personal accomplishment of the MBI as “professional efficacy”; hence, provides support to our procedure of dropping personal accomplishment.

### ***Relation between SE and burnout***

Over the past few decades, research examining teacher SE and job burnout has become more precise and specific. Numerous studies have produced findings illuminating the relationship between the two constructs. The extent to which teaching SE affects or relates to a person’s EE (burnout) has been the focus of extensive research, mostly with Western populations and within a Western context and conceptualization of stress (Hobfoll, 2011; Skaalvik & Skaalvik, 2010). Generally, these studies suggest that high SE beliefs are associated with emotional health (Pines, 2002; Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010; Yu et al., 2015).

Specifically, many researchers argued and found that burnout develops when individuals feel inefficacious and they can do nothing to help their students (e.g., Fida, Paciello, Tramontano, Barbaranelli, & Farnese, 2015; Jex & Bliese, 1999; Pines, 2002; Pines & Keinan, 2005; Schaufeli & Salanova, 2007; Schwarzer & Hallum, 2008; Shoji, Cieslak, Smoktunowicz, Rogala, Benight & Luszczynska, 2015; Skaalvik & Skaalvik, 2010). These researchers highlighted the important role of SE in reducing burnout effect.

Despite the large amount of research devoted to examining the relationship between SE and burnout, different specifications have been used with the two constructs. Some researchers have used SE and burnout as global constructs (e.g., Yu et al., 2015). Others used only two of the burnout subscales (e.g., Skaalvik & Skaalvik, 2010). None of the previous studies that have been reviewed examined the two constructs in their full dimensions. Also, no study was found in an Arabic setting and in conjunction with job value. We argue that job value would illuminate teachers’ efficacy beliefs and well-being (Bandura, 1994). This is another addition of this research.

### ***The present investigation***

To achieve generalizability of relationships between job value, SE and burnout, hypotheses related to such relations should be supported in different populations and settings. The present study tested several hypotheses related to the three constructs (job value, SE and burnout) in a non-western population and newly researched environment. The population of



Oman is moderately religious, traditional and collectivistic (see Abu-Hilal, Aldhafri, Al-Bahrani & Kamali, 2015). Within these characteristics, teachers in Oman share similar duties and tasks performed by other teachers in different parts of the world. The results of this study would add to teaching burnout literature. Of course, the results obtained from this study will be specific to Oman but the methods and motivation (using psychometric techniques) of this research can be readily applied to comparisons among other Arabic and third world cultures. In regard to the hypotheses concerning invariance across gender, Omani male and female teachers have different social roles in a patriarchal and traditional society (Abu-Hilal et al., 2015) which may influence the way they perceive job value, SE and burnout; however, the constructs involved in the study should be invariant across the two populations. This is, Omani male and female teachers would produce similar parameters including relations among the constructs.

### ***Hypotheses***

Based on the relevant literature and theoretical frameworks, the study was designed to test the following hypotheses:

- Job value would positively predict the teachers perceived SE of engaging students, SE of instructional strategies and SE of classroom management, but negatively predict perceived EE, depersonalization of job and students. In other words, job value would have a positive effect on SE; while at the same time it would have negative effect on EE and depersonalization.
- Each of SE dimensions would negatively predict teachers' EE and depersonalization. In other words, SE in classroom management, instruction and student engagement would have negative effects on EE and depersonalization.
- The structure of the three constructs (loadings) and their relationships among the constructs are assumed to be invariant across male and female Omani teachers.

## **Method**

### ***Sample***

The sample consisted of 2446 Omani teachers (male = 997, female = 1449) who were randomly drawn from the eleven educational directorates of Oman. The target population from which the sample was drawn was 17000 public school teachers, although the total number of teachers in Oman was nearly twice this number ( $N=34000$ ). Two conditions were

placed when selecting teachers. The first was that selected teachers should teach grades above 4<sup>th</sup> grade. This condition was placed to avoid distortion of data due to weak reading ability of fourth graders and below. The second was that the school should have a strong internet connection as instruments were administered online. The selected teachers were from 302 schools from all eleven directorates of Oman. The average experience at the teacher's present school was 6.16 ( $SD = 4.28$ ) years [*overall experience was not provided*]; and the average workload was 15.66 ( $SD = 4.28$ ) classes per week. About 34% of the sample were from hard science majors, the remaining were from language and literature (Arabic and English), social sciences, music, arts, and PE.

There has been an increasing awareness of the limitations of traditional approaches to missing data such as mean substitution, listwise deletion, or pairwise deletion for missing data. Multiple imputations was used to deal with missing responses. In the imputation model, we included all variables used in any of the analyses. Five imputed data sets were constructed, and one of the five sets of scores was used with each of the imputed data sets. This strategy allowed for an appropriate handling of missing data in the same set of analyses. In each case, reported results are based on an appropriate aggregation of results across the multiple data sets to obtain appropriate parameter estimates, standard errors, and goodness-of-fit statistics.

### ***Instruments***

#### *The value of teaching*

This scale is a part of a questionnaire specifically designed to measure attitudes towards teaching (Abu-Hilal, Aldhafri, Kilani, Kadhem, Al-Qaryouti & Al-Kharousi, 2014) . It contains 7 items, each consisting of a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Negative items were reversed so that the higher the score the more the value of teaching. Example of items is: 'Our society looks to teachers with respect'. The results of the exploratory factor analysis showed an optimal structure with items loading significantly only on a single factor. Internal consistency was acceptable with Cronbach's alpha at .77.

#### *Teacher burnout (MBI)*

Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996; Maslach & Schaufeli, 1993) was used. In the present study, 13 items measuring the frequency of some burnout

symptoms were used. Responses were anchored on a Likert scale that ranged from 1 (*does not happen at all*) to 7 (*happens almost daily*). High scores indicate EE and depersonalization. In the present study, three constructs were used: EE ( $\alpha = .87$ , 8 items), depersonalization of job ( $r = 0.66$ ,  $p < 0.01$ , 2 items) and depersonalization of students ( $\alpha = .47$ , 3 items). Exploratory factor analysis extracted two factors where the items of depersonalization of students loaded on one factor and the items of depersonalization of job loaded on the other. Translation of the MBI into Arabic and back translation procedures have been reported in other studies (e.g. Abu-Hilal & Salameh, 1992).

#### *Teacher's sense of self-efficacy (TSES)*

This instrument was developed by Tschannen-Moran et al. (1998) with 24 items in the form of questions. In the current study, the instrument is composed of 22 items. It consists of three constructs: efficacy in student engagement (8 items, e.g., '*How much can you do to get through to the most difficult students?*'  $\alpha = .84$ ), efficacy in teaching (8 items, 'e.g., *How much can you do to adjust your lessons to the proper level for individual students?*'  $\alpha = .85$ ), and efficacy in classroom management (6 items, e.g., '*How much can you do to get children to follow classroom rules?*'  $\alpha = .84$ ). Responses rang from 1 (*nothing*) to 7 (*too much*). TSES was used in other studies, and both translation and back translation were appropriately performed (for details on translation see Abu-Hilal, Aldhafri, Kilani, Kadhem, Al-Qaryouti & Al-Kharousi, 2016; Aldhafri & Ambusaidi, 2012).

#### *Structures of the measures*

Confirmatory factor analysis (CFA) indicated that each of the instruments used in this study possessed structural validity. Each structure was tested separately. As for job value, all seven items loaded on one factor with loadings are ranging from 0.47 to 0.62 ( $\chi^2_{(9)} = 31.008$ ,  $CFI = 0.994$ ,  $TLI = 0.985$ ,  $RMSEA = 0.030$ ). The MBI was tested with three factors, and it had a reasonable fit with substantial loadings that ranged from 0.35 to 0.92 ( $\chi^2_{(60)} = 663.177$ ,  $CFI = 0.949$ ,  $TLI = 0.933$ ,  $RMSEA = 0.064$ ). TSES was tested with three factors, and it had a reasonable fit with substantial loadings that ranged from 0.50 to 0.76 ( $\chi^2_{(206)} = 1386.450$ ,  $CFI = 0.936$ ,  $TLI = 0.928$ ,  $RMSEA = 0.051$ ). The analyses revealed that the conceptualizations of both SE and burnout as outlined earlier were generalized to Omani teachers.

With respect to the validity of MBI, our analysis provides a close to perfect replication of earlier results and thereby adding another important link to the chain of studies (e.g., Abu-Hilal & Al-Emadi, 2000; Abu-Hilal & Salameh, 1992; Byrne, 1994; Iwaniki & Schwab, 1981; Skaalvik & Skaalvik, 2010). With respect to the validity of TSES, the results produced three distinct constructs. Hence, validation of job value, SE and burnout in the Arab culture is accumulating.

### ***Models and analysis***

Confirmatory factor analysis (CFA) was conducted on each of the instruments separately applying the Amos program version 23. The *a priori* 1-factor model for the job value scale; *a priori* 3-factor model as a structure of MBI (personal accomplishment was dropped); and *a priori* 3-factor model as a structure of the TSES were tested separately. A correlated structural model was tested with one factor for job value, three factors for MBI, and three factors for TSES. The path model (Figure 1) was then tested. In all of these models, we used the maximum likelihood estimation.

Multisampling CFA was then conducted with gender as the grouping variable. The research question of whether there is support for the invariance of factor loadings, item intercepts, factor correlations and paths across gender is addressed. The maximum likelihood method was used. The  $\chi^2$  statistic is widely known to be sensitive to sample size. Four additional fit statistics were used to encounter this issue: The  $\chi^2/df$ , the comparative fit index (CFI), the Tucker-Lewis index, and the root mean square error of approximation (RMSEA) (Dimitrov, 2010). Acceptable model fits are indicated by CFI and TLI values  $>0.90$ , RMSEA  $<0.08$  (Hu & Bentler, 1999) and  $\chi^2/df <5.0$ .

The difference in chi square ( $\Delta\chi^2$ ) is most commonly used as a goodness-of-fit index for invariance tests. However, Cheung and Rensvold (2002), and Dimitrov (2010) proposed that either  $\Delta CFI$  or  $\Delta TLI$  are robust statistics for testing between-group invariance. The value of smaller or equal to 0.01 indicates that the null hypothesis of invariance may be tenable.

We also conducted a path analysis using the global SE and burnout to examine the relationships among the constructs in order to test whether the results of global constructs differ from the more detailed (multiple facets) model of relationships. In this analysis we used the sum (composite) of the items as a score for each global construct.

## Results

### *Measurement Model*

Firstly, the measurement model of the seven latent constructs was tested to assess the extent of goodness of fit represented by its indicators respectively. If indices of confirmatory measurement model meet the requirements, the maximum likelihood estimation would be used to test the SEM.

The test of the measurement model came into being a satisfactory fit to the data:  $\chi^2$  (789,  $N=2446$ ) = 2961.719,  $p < 0.001$ ,  $\chi^2/df = 3.754$ , CFI=0.941, TLI=0.936, RMSEA=0.034. All the factor loadings for the indicators on the latent constructs were significant ( $p < 0.001$ ), and the latent constructs were well represented by their indicators. Table 2 shows the correlation coefficients among the latent constructs of job value, burnout, and SE. All correlation coefficients were significant ( $p < 0.01$ ) and in the predicted direction. The three burnout constructs were positively correlated. Job value was positively and moderately related to the dimensions of SE, indicating that those who perceived teaching to be of greater value showed more SE in teaching, engaging students and classroom management. Job value was negatively and strongly related to the three burnout dimensions suggesting that the more the job was perceived as valued, the less burnout was expressed. SE dimensions were negatively-weakly to moderately- related to the burnout dimensions ( $p < 0.01$ ).

Table 1. *Standardized loadings on the respective factors*

Items	<i>JV</i>	<i>SE CM</i>	<i>SE ES</i>	<i>SE TS</i>	<i>EE</i>	<i>D_J</i>	<i>D_S</i>
1	.554**	.709**	.585**	.483**	.491**	.712**	.400**
2	.616**	.760**	.580**	.538**	.671**	.911**	.353**
3	.473**	.713**	.639**	.634**	.732**		.717**
4	.585**	.647**	.632**	.724**	.772**		
5	.601**	.620**	.652**	.714**	.540**		
6	.577**	.626**	.676**	.591**	.750**		
7	.584**		.648**	.735**	.620**		
8			.611**	.695**	.707**		

Note: *JV*=job value; *SE CM*=self-efficacy classroom management; *SE ES*= self-efficacy engaging student; *SE TS*=self-efficacy teaching strategies; *D\_J*=depersonalization of job; *D\_S*=depersonalization of student.

\*\*  $p < .001$

Table 2. *Correlations, means and standard deviations of the latent constructs of job value, self-efficacy and burnout for Omani teachers*

	1	2	3	4	5	6	Mean	SD
1. Job Value	1.00						23.18	5.21
2. SE CM	.125**	1.00					24.64	3.29
3. SE TS	.173**	.737**	1.00				32.56	3.75
4. SE ES	.298**	.698**	.832**	1.00			29.80	4.25
5. EE	-.622**	-.211**	-.221**	-.348**	1.00		28.87	10.72
6. D_J	-.477**	-.173**	-.149**	-.232**	.704**	1.00	4.19	2.94
7. De_S	-.578**	-.177**	-.243**	-.404**	.842**	.574**	6.83	3.32

Note. SE: Self-efficacy; CM: Classroom management; TS: Teaching strategies; ES: Engaging students; EE: Emotional exhaustion; D\_J: Depersonalization of job; D\_S: Depersonalization of students.

\*\*  $p < .01$

*Job value SE and burnout: invariance across gender*

Next, the structural model (Figure 1) was tested. The model was first tested for each gender separately. The fit of the model to data for each gender was acceptable (see Table 3).

Table 3. *Summary of goodness of fit statistics (Figure 1) for the sample of males and females separately*

Model	$\chi^2$	DF	$\chi^2/DF$	CFI	TLI	RMSEA	Lo90	Hi90
Males	1543.838**	776	1.989	0.955	0.950	0.032	0.029	0.034
Females	1829.880**	776	2.358	0.947	0.941	0.031	0.029	0.032

Note. CFI: Comparative fit index; RMSEA: root mean square error of approximation.

\*\*  $p < .01$

Then, we tested the model fit across gender. Measurement invariance, structural invariance, and structural path invariance were examined across gender. A series of invariance tests were conducted and Table 3 shows the results. The results suggested that factor loadings (M2) were invariant between genders (CFI=0.948, TLI=0.944, RMSEA=0.022). In M3, the item intercepts were invariant across gender (CFI=0.948, TLI=0.944, RMSEA=0.025); the decrease in TLI was less than .01 ( $\Delta TLI=0.001$ ) indicating that adding constraints of equality

on intercepts did not affect the fit (Dimitrov, 2010). In M4, we examined if structural paths were invariant across gender and the results indicated that structural paths were invariant (CFI=0.948, TLI=0.944, RMSEA=0.022,  $\Delta TLI$ = 0.001). In M5, invariance of structural covariances was examined (CFI=0.948, TLI= 0.944, RMSEA=0.022,  $\Delta TLI$ =0.001) indicating that covariances were invariant across gender. In M6 invariance of structural variances was examined, and the results suggested that factor variances were invariant across gender (CFI=0.947, TLI=0.943, RMSEA=0.022,  $\Delta TLI$  = 0.002). Finally, M7 tested invariance of measurement residuals in addition to all other parameters. The results indicated that measurement residuals were invariant across gender (CFI= 0.940, TLI= 0.938, and RMSEA= 0.023,  $\Delta TLI$ = 0.007). Hence, our results provide support to the third hypothesis.

Table 4. Summary of goodness of fit statistics for the nested models across gender from Figure 1

<i>Model</i>	$\chi^2$	<i>DF</i>	$\chi^2/DF$	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>Lo90</i>	<i>Hi90</i>	$\Delta TLI$
M1 Unconstrained	3373.771**	1552	2.174	.950	.945	.022	.021	.023	--
M2 Factor loadings	3498.978**	1587	2.205	.948	.944	.022	.021	.023	.001
M3 Measurement intercepts	3498.978**	1587	2.205	.948	.944	.022	.021	.023	.001
M4 Structural weights	3509.892**	1602	2.191	.948	.944	.022	.021	.023	.001
M5 Structural co-variances	3527.550**	1603	2.201	.948	.944	.022	.021	.023	.001
M6 Structural residuals	3578.798**	1615	2.216	.947	.943	.022	.021	.023	.002
M7 Measurement residuals	3899.922**	1679	2.323	.940	.938	.023	.022	.024	.007
Independence model	38480.338**	1722	22.346	.000		.093	.093	.094	

Note. *CFI*: Comparative fit index; *TLI*: Tucker-Lewis index; *RMSEA*: root mean square error of approximation.

\*\*  $p < .01$

Figure 1 shows the results of the analysis. Path coefficients from job value to SE constructs were significantly positive ( $p < 0.05$ ) and this in line with our predictions. All path coefficients from job value to the burnout dimensions were significantly negative ( $p < 0.01$ ) and this also agreed with our predictions and provided support to first hypothesis. However, SE constructs were inconsistently linked to burnout dimensions. SE of engaging students was negatively related to each of the burnout dimensions ( $p < 0.05$ ) and this supported our predictions. Whilst, SE of classroom management was significantly related to only depersonaliza-

tion of students, albeit positively and in contradiction to our prediction. Similarly, SE of instruction was positively related to EE and depersonalization of students ( $p < 0.05$ ) and this also contradicted our predictions. Thus, the second hypothesis was only partially supported.

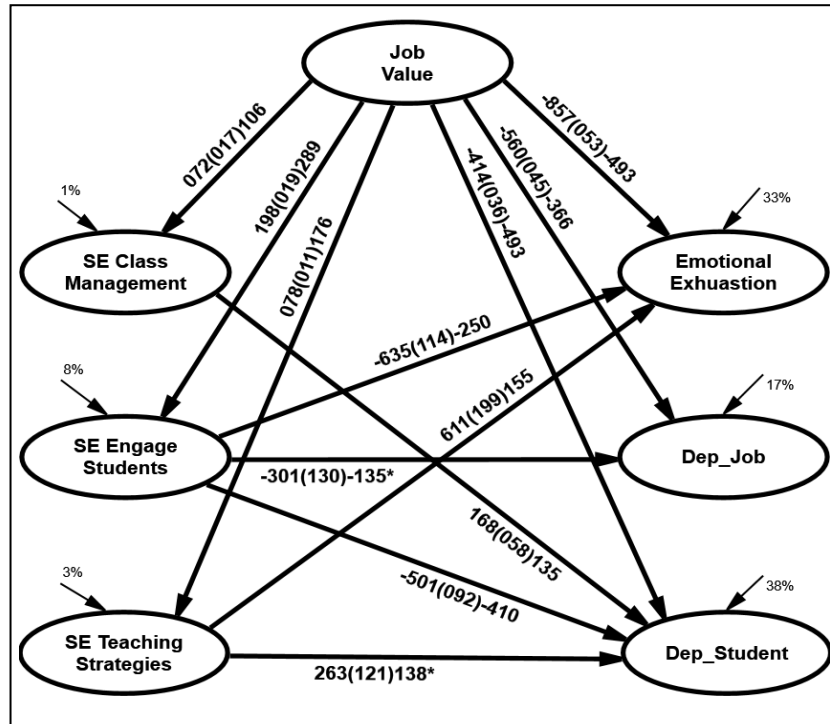


Figure 1. A structural model of relationships among job value, dimensions of self-efficacy and dimensions of burnout for Omani teachers.

Note. SE: self-efficacy; Dep\_Job: depersonalization of the job; Dep\_Student: depersonalization of student; coefficients: to left are un-standardized, in brackets are standard errors, to the right are standardized. Observed variables, residuals and correlations among residuals, and non-significant paths are not shown for clarity. %: variance explained. decimal points omitted.

\*  $p < .05$ ; all other path coefficients significant at  $p < .01$ ; non-significant paths omitted

As for the mediation effect, all constructs were significantly correlated and a potential mediating effect existed between job value and burnout via SE dimensions. The indirect (mediated) standardized paths from job value to burnout dimensions were -0.03 (for depersonalization of the job), -0.051 (for EE), and -0.08 (for depersonalization of students). Standard errors could not be computed and the significance of these coefficients cannot be judged. For example, due to the indirect (mediated) effect of job value on depersonalization of students, when job value goes up by 1 standard deviation, depersonalization goes down by 0.08 standard deviations. The mediated effects of job value on the other two burnout constructs via SE had similar (negative) pattern. Therefore, SE proved to be a mediating factor in the relation of



job value with EE and depersonalization. Significant variance in each of the burnout dimensions was explained. About 33% of the variance in EE was explained; about 38% of the variance in depersonalization of students was explained; and approximately 17% of the variance in depersonalization of the job was explained by job value and the dimensions of SE.

Finally, the results of the path analysis with global constructs (Figure 2) revealed that job value was positively related to SE but negatively related to burnout; and SE was negatively related to burnout. Table 5 shows the descriptive statistics and correlations among the three constructs. Only 3% of the SE variance was explained by the job value; and 23% of the burnout variance was explained by job value and SE together.

Table 5. Correlations, means, and standard deviations of the three global constructs

	<i>Job value</i>	<i>Self-Efficacy</i>	<i>Mean</i>	<i>SD</i>
Job value	1.00		23.18	5.21
Self-Efficacy	.180**	1.00	86.10	9.81
Burnout	-.460**	-.232**	39.89	14.66

\*\*  $p < .01$

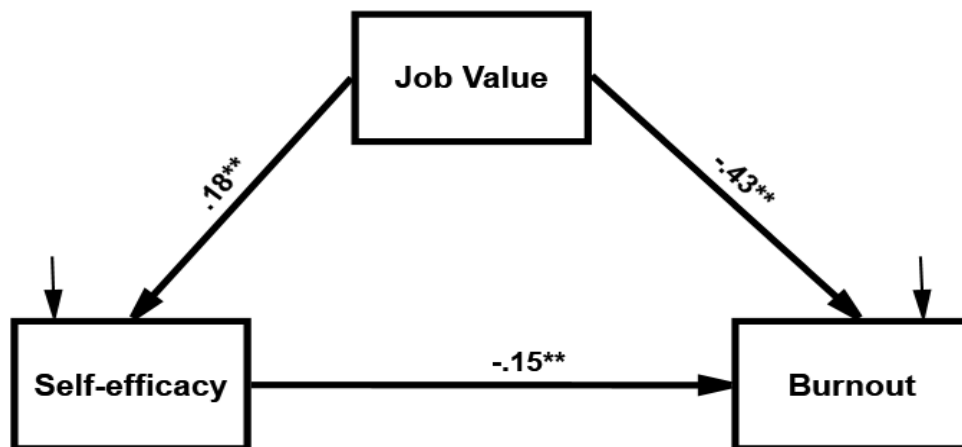


Figure 2. Path analysis model of relationships among job value, self-efficacy and burnout for Omani teachers using total (global) score of each construct.

\*\*  $p < .01$ .

## Discussion and Conclusion

### *Relations among job value, SE and burnout: SEM model*

The results of the structural model (Figure 1) produced some results that are consistent with our predictions; and other results that are inconsistent with predictions, indicating that the relationships between efficacy beliefs and burnout is more complex than was proposed. Consistent with predictions, Omani teachers who perceived that job value is a conserved resource seemed to express higher self-efficacy –in teaching, management, and engaging students- and at the same time express less EE, depersonalization and detachment. As such, these results provide support to the COR theory (Hobfoll, 2011).

The results of relation between SE and burnout are not completely consistent with predictions and previous research. SE in engaging students stands out as the most important SE resource in predicting emotional exhaustion and depersonalization. This result provides support to previous research (e.g., Bandura, 1992; Grau et al., 2001; Shoji et al., 2015; Skaalvik and Skaalvik, 2010; Yu et al., 2015) that this particular SE acts as a protective factor against burnout. Engaging students pertains to the perception of teachers toward the relationship between teaching and learning; and teachers impact on the development of their students. Hence, when teachers' beliefs in engaging students are weak, teachers show symptoms of burnout (Skaalvik & Skaalvik, 2010; Yu et al., 2015). Engaging students is only partially a responsibility of the teacher, and may require teacher's extra effort. However, low effort doesn't necessarily reflect low ability. It is easier for the teacher to admit weak effort than admitting low ability. Weak students' engagement is readily attributed to students and occasionally to less efforts exerted by teachers themselves (Yu et al., 2015). In other words, student's disengagement is not completely a failure attributed to the teacher; but mainly attributed to students as well as parents. These results highlight the importance of SE of engaging students as a significant resource that may guard against burnout among teachers.

The results of the SEM revealed some inconsistent patterns of relation and require explanation. Surprisingly, inconsistent with our predictions and with previous research (e.g., Grau et al., 2001; Skaalvik & Skaalvik, 2010; Yu et al., 2015), the links of SE in teaching with EE and depersonalization of students were positive. A possible explanation for these results may relate to Bandura's (1992) consideration that teachers who believe they have adequate capabilities to teach, generally display greater motivation and performance. Likely, they

become extremely frustrated when they are over restricted in their work activities by constraints that are not under their direct control (e.g., student misbehavior and students low motivation). As indicted earlier, SE in instruction is related to teachers' abilities and self-esteem. Admitting weakness in instruction (e.g., attributing failure to low ability) is self-threatening. In contrast to engaging students, skills in instruction is only attributable to the teachers themselves. Therefore, they may express high level of SE in teaching but at the same time they express high level of EE as a sign of frustration (Bandura, 1992).

Also, in contrast with our initial hypothesis, teachers with higher sense of SE in instruction, show more cynicism (depersonalization) toward students. As indicated above, weak SE in instruction may represent weak ability, something teachers are not willing to admit. As such, teachers who express high efficacy in instruction tend to be more frustrated by students unresponsive behavior and become more cynical than those with low SE in instruction (Bandura, 1992).

The positive link between SE in classroom management and depersonalization of students was unexpected. Poor classroom management, like poor instruction, may imply low ability and represents a threat to the self. What efficacious teachers may say is "we are good at managing our classes, but we are still stressed by students' unresponsive behaviors". Teachers do their job in their classes, but they still have difficulty controlling students' behaviors. Moreover, teachers may feel frustrated as regulations prevent teachers from being able to punish students who misbehave. Furthermore, it is believed that the student's behavior as a source of burnout is a complex and sensitive issue in the Arab world (Abu-Hilal, 1995; Abu-Hilal & Salameh, 1992) and in Omani schools in particular. Even if teachers feel cynical toward students, they are keen to hide such feeling (Abu-Hilal & Al-Emadi, 2000). This is probably one reason behind the weak reliability of this construct and the positive relation with SE in teaching.

The links between depersonalization (job) with SE in instruction and SE in classroom management, were inconsistent with our predictions. Substantively speaking, considering the conditions of teachers –income and social status-, it is not surprising that efficacious and non-efficacious teachers may suffer equally some kind of detachment from their job (Alobaid, 2006). Methodologically speaking, job value was more strongly related to burnout dimensions than to SE dimensions; but SE dimensions were more strongly interrelated which were less

related to burnout dimensions. When all constructs were put in one regression equation, more variance was shared among the SE dimensions than with burnout constructs. Hence, the correlation analysis was different from the SEM analysis. The results may be contingent upon the method of analysis and require further investigation.

#### *Relations among job value, SE and burnout: global constructs*

When constructs are treated as global constructs (Figure 2), the results support the findings of previous research. It was proposed and found that the more the teachers perceive their role as socially important and significant (e.g., receive more social support, and personally more rewarding) the higher their SE. Also, the pattern of relation between job value and burnout in this study is consistent with the results of previous research (e.g., Hunt & Stein, 2012; Pines & Keinan, 2005), indicating that weak job significance may be stressful for teachers; and may coincide with losing interest which may ultimately appear in the form of burnout.

Additionally, with global constructs, results are consistent with previous studies that found negative association between SE and burnout (e.g., Bandura, 1992; Grau et al., 2001; Skaalvik & Skaalvik, 2010; Yu et al., 2015), indicating that SE can be a protective mechanism that can control negative affect. The results with global constructs provide evidence for a second COR assumption which states that the investment of resources reduces the negative effects of stressful situations. All in all, these results suggest that the provision of job resources relates to the increased teacher professional resources, which in turn, relates to the reduced burnout (Hobfoll, 2011).

#### *Implications for theory*

Findings of this study have implications for our understanding of teaching stress and burnout. The study represents an attempt to examine the job value and SE as important cognitive resources in controlling and reducing burnout. According to the social role theory and COR theory, job value and SE beliefs are parts of the self-regulatory system that regulates negative affect such as stress and burnout (Hobfoll, 2011). The findings of our study provide empirical support to both the social role theory and COR theory that job value, as a cognitive regulatory resource, regulates and controls –directly or indirectly– negative affect such as emotional exhaustion, detachment and cynicism.

In addition, the findings support that SE is a multifaceted construct and that the regulatory effect of its facets are not uniform. The regulatory effect of the facets seems to be dependent on the nature of efficacy beliefs as well as how the outcomes are attributed. If the outcomes are attributed to effort, the relationships are consistent with both the provisions of the social cognitive theory and causal attribution theory (Bandura, 1992). However, if outcomes are attributed to ability –self-threatening outcomes-, the relationship between SE and burnout is not readily consistent with social cognitive theory. Probably, more theorizing about the relation among SE and burnout is needed. It is important in this kind of theorizing to differentiate between SE as an ability or effort in nature. Reciprocal relations among the constructs is one consideration that needs to be explored. All in all, the relation between SE and burnout is more complex than was anticipated.

#### *Implications for practice*

The implications of our results are that policy makers need to design initiatives and policies in the form of more incentives to teachers, so that the value of their role as teachers may improve. In turn, as their job gains more value, teachers may be in a better position to be more efficacious in motivating their students, which will result in less EE and cynicism. Among other policies that need to be considered, the workshops for teachers are required to help them become more confident and skilled in motivating students. The bases for such policies are evident in the present study.

Also, the results of this study have important implications to programs of teacher preparation. Curriculum developers of teacher education programs need to incorporate courses that include training on how to engage and motivate students. The present study has provided an indication that improving teachers' beliefs in the value of their job, and their abilities to engage students would help mitigate burnout.

#### *Limitations and future research*

While this study offers important findings in relation to teaching as a profession, the results should be interpreted with some caution. The findings of this study should not be interpreted as showing that low job value and low SE are the main causes of burnout. The question remains whether low ability beliefs in teaching and classroom management persist to be associated with low EE and depersonalization. Also, do efficacious teachers in teaching and

classroom management still show frustration and get burned out? Probably, these issues need to be resolved by future research.

Future research in the Arab world and in Oman in particular should reconsider the construct of depersonalization (students) by adding more items to the subscale. Moreover, researchers need to pay more attention to the issue of measuring SE as the dimensions are somewhat strongly correlated, and inconsistently related to burnout dimensions. Qualitative designs and classroom observations and principal's evaluation may overcome the problematic self-report, and enhance the practical validity of SE measures. Future research might consider and apply such methods to collect data about teachers' instruction and classroom management in conjunction with their behavior toward their students.

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