

FACTORS PREDICTING TEACHER BURNOUT: THE MODERATION ROLE OF PERCEIVED SOCIAL SUPPORT

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The terminal objectives of this study are to examine: the direct effects of stressors on teacher burnout and the moderation effects of social support on the relation between stressors and teacher burnout. A total sample of 202 special education teachers in the Kingdom of Saudi Arabia completed a 68-item digital countrywide survey questionnaire delivered through email to all special education teachers. For current study, hypotheses were tested based on structural equation modelling (SEM). Results revealed that: (1) role overload had shown significant direct effects on the three dimensions of teacher burnout; (2) role ambiguity had shown significant direct effects on the three dimensions of teacher burnout; (3) role conflict had shown significant direct effects on depersonalization and decreased personal accomplishment; (4) no moderation effect for social support on the relationship between stressors and the three dimensions of teacher burnout.

Keywords: Burnout, perceived social support, role ambiguity, role conflict, role overload

INTRODUCTION

In the Kingdom of Saudi Arabia (KSA), the educational system is challenged by a high number of retiring teachers and by a substantial percentage of beginning teachers who leave the profession (Ministry of Education, 2018). Teachers' turnover has received broad scholarly attention (e.g. Müller, Alliaata, & Benninghoff, 2009), teaching students with emotional/behavioural disorders was associated with a large increase in the odds of turnover for special education teachers (Gilmour & Wehby, 2019). In order to avoid the negative effect of teacher turnover on student's performance and to keep teachers in their job, it is imperative to investigate which factors contribute to attrition such as teacher burnout and stressors. Stressful working conditions are among the reasons behind leaving the teaching profession (Cancio, Albrecht, & Johns, 2013; Hinds, Jones, Gau, Forrester, & Biglan, 2015; Langher, Caputo, & Ricci,

2017; Traver, 2018). Potential results from teacher stress are reduced job satisfaction (Conant, 2017; Pan, Shen, Liu, Yang, & Wang, 2015), decreased teacher self-efficacy (Skaalvik & Skaalvik, 2016), highest levels of exhaustion and burnout (Langher et al., 2017; Wang, Hall, & Rahimi, 2015), increased teacher attrition (Skaalvik & Skaalvik, 2016; Wang et al., 2015), and increased level of intention to leave (Ryan et al., 2017). Special education teachers are at risk for experiencing feelings of stress because of their multiple job demands (Atiyat, 2017; Langher et al., 2017). Indeed, the burnout construct and its factors (emotional exhaustion, depersonalization, and a lack of personal accomplishment) are thought to be the results of long-term stressful situations (Maslach & Jackson, 1981). Thus, one cannot become “burned out” without experiencing intense stressors for an extended period.

Teacher burnout has been found to affect the quality of educational services, teacher’s classroom behaviour, and the teaching profession. Furthermore, burnout is a crucial construct in understanding job-related stress processes and has been identified as an important predictor of employee turnover. In addition, the literature indicates that burnout contributes to employees’ intentions to leave their job across different organizational settings, including teaching (Chang, 2009). Burnout therefore contributes to teacher attrition, which is considered an important educational challenge worldwide (Cha & Cohen-Vogel, 2011; Keigher, 2010; Kukla-Acevedo, 2009; Langher et al., 2017; Maslach, Schaufeli, & Leiter, 2001; Van Maele & Van Houtte, 2015).

Unfortunately, students are not spared from the negative influence of teacher burnout. Students of disengaged or exhausted teachers are frequently disruptive, struggle socially and emotionally, and attain their Individualized Education Plan (IEP) goals less frequently – all of which impact academic development (Jennings & Greenberg, 2009; Ruble & McGrew, 2013). Thus, teacher burnout presents a problem for students, their families, and school systems as they attempt to respond to students’ academic, behavioural, and social struggles. In short, the effect of teacher burnout is far-reaching, impacting more than solely the teacher experiencing its effects.

According to Ghanizadeh and Jahedizadeh (2015) and Moss (2015), role conflict, role ambiguity, and role overload were among the most detrimental sources of burnout. Furthermore, several scholars indicated that perceived support contributed to burnout (Caputo & Langher, 2015; Kumar & Kamalanabhan, 2017; Langher et al., 2017, 2016; Z. Xu & Yang, 2018). However, a dearth of studies has been conducted in the Saudi Arabia (KSA) context on factors potentially affecting burnout among special education teachers in Saudi Arabia. That being the case, the present study has been conducted to investigate the association between stressors (i.e., role conflict, work overload, and role ambiguity) and teacher burnout in the Kingdom of Saudi Arabia.

THEORETICAL FRAMEWORK

The present study is guided by multidimensional model of burnout (Maslach, Schaufeli, & Leiter, 2001), role stress theory (Katz & Kahn, 1966; Rizzo, House, & Lirtzman, 1970), social support model (Halbesleben, 2006), and empirical evidence (See Figure 1).

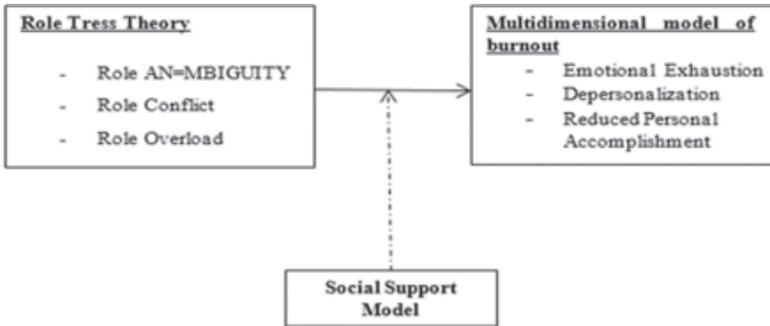


Figure 1. Theoretical framework of the study.

The multidimensional model of burnout consists of three correlated components; 1) emotional exhaustion, 2) depersonalization, and 3) decreased personal accomplishment. These three components are represented as correlated factors in the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981). Burnout is considered as “a type of psychological stressor” and “a chronic negative psychological condition that results in day-to-day work stressors taking their toll on educators” (Brown & Roloff, 2011 p.453). Maslach and Jackson (1981) defined it as long-term stressors response of an individual to prolonged exposure to emotional and interpersonal stressors at work.

Emotional exhaustion refers to feelings of fatigue that develop while one’s emotional energies become drained (Chang, 2009; Maslach et al., 2001). In the education environment, teachers who are in a state of emotional exhaustion have nothing else to contribute and feel used up (Schaufeli, Maslach, & Marek, 1993). Depersonalization, meanwhile, points to the development of indifferent and negative attitudes toward others; it refers to the impersonal and dehumanized perception of (service) recipients. In the education environment, depersonalization may be described as cynical attitudes toward students and colleagues (Hakanen, Bakker, & Schaufeli, 2006).

Reduced personal accomplishment reflects the deterioration of work productivity, success in work and interaction with people. Reduced personal accomplishment is the negative valuation of personal accomplishments in working with other people and dissatisfaction with one’s achievements, often accompanied by feelings of insufficiency and poor professional self-esteem (Cordes & Dougherty, 1993). In the education environment, reduced personal

accomplishment refers specifically to the educators' view of their effectiveness as teachers (Billingsley, 2004).

Role-stress theory defines stress resulting from role ambiguity and role conflict in multi-tasking staff with multiple roles (González-Romá & Lloret, 1998; Kelloway & Barling, 1990). The role stress theory postulates that organizational factors generate role expectations among role transmitters, who then transmit these as role pressures to the individual (Kahn et al., 1964). When individuals lack clear guidelines and views regarding their role responsibility and authority, they will face stress, become dissatisfied and exhibit less effective performance (C. Lee & Schuler, 1980).

Role stress includes role overload, role conflict and role ambiguity (Schaubroeck, Cotton, & Jennings, 1989). Role overload occurs when role expectations are greater than the individual's abilities to perform the task (Conley & Woosley, 2000). Role ambiguity occurs when employees are unclear about the duties and procedures required in their jobs (Ivancevich & Matteson, 1980). Role conflict occurs when employees believe that the group's expectations and demands are incompatible and cannot be satisfied at the same time (Ivancevich & Matteson, 1980). In educational settings, role conflict, role ambiguity, and role overload have been positively correlated with burnout (Ahmed, Sultana, Paul, & Azeem, 2013; Klassen, Usher, & Bong, 2010; Lue, Chen, Wang, Cheng, & Chen, 2010; Wang et al., 2015; Xu, 2019; Yürür & Sarıkaya, 2012). As such, we expected that stressors are positively correlated with teacher burnout.

Perceived social support refers to the subjective perception of the general availability of support when needed (Sarason, Sarason, & Pierce, 1990). According to Demaray, Malecki, Davidson, Hodgson, and Rebus (2005), social support is the individuals' perception that they are loved and valued by people in their social network. Social support is also defined as perceptions of specific or general support (emotional, informational, appraisal, instrumental) from people in the sources of support (Malecki & Demaray, 2003). According to the social support model (Karasek, 1979), the labour strain is defined as a combination of high workplace requirements and reduced decision-making or workload control.

This model predicts that workers with high-pressure jobs, who have high requirements in combination with little control and lack of workplace social support, are at high risk of burnout (Clays et al., 2007). According to the social support model (Halbesleben, 2006), the use of social support systems significantly reduces levels of job-related stress or burnout. In teaching, social support from managers and colleagues was believed to reduce burnout (Skaalvik & Skaalvik, 2010).

It has been found that perceived support can buffer the negative effects of stressors (Bataineh & Alsagheer, 2012; Kumar & Kamalanabhan, 2017; Kinman, Wray, & Strange, 2011; Langher et al., 2017). Therefore, it was expected that social support and organizational support would predict by itself, or through interactions with job stressors. However, many special education teachers feel that they are not supported by their principals, not receiving social support,

and may lack the resources to manage or reduce the overload of responsibilities (Kaff, 2004). Nonetheless, we know little about the moderation effect of social support on the relationships between stressors and burnout among special education teachers. After extensive literature analysis, no studies have been conducted to investigate the moderation effect of social support on stressors-burnout link in the Saudi context. As such, a study on the role of social support in buffering the relationship between burnout and stressors is warranted.

PURPOSE OF THE STUDY

The purpose of this study is to investigate the contribution of stressors (i.e., role ambiguity, role conflict, and role overload) to teacher's burnout. Besides that, it was done to test the moderation effect of social support on the relationship between stressors and teacher burnout.

RESEARCH QUESTIONS

This study sought answers to the following questions:

1. Do stressors (i.e., role overload, role ambiguity, and role conflict) have statistically significant direct effects on teacher burnout?
2. Does perceived social support significantly moderate the relationships between stressors and teacher burnout?

RESEARCH HYPOTHESES

This study is designed specifically to test the following hypotheses:

1. Stressors (i.e., role overload, role ambiguity, and role conflict) have direct effects on teacher burnout.

To evaluate the first hypothesis, it was further divided into following nine sub-hypotheses:

- H_{1.1}: Role overload directly affects emotional exhaustion.
- H_{1.2}: Role overload directly affects depersonalization.
- H_{1.3}: Role overload directly affects decreased personal accomplishment.
- H_{1.4}: Role conflict directly affects emotional exhaustion.
- H_{1.5}: Role conflict directly affects depersonalization.
- H_{1.6}: Role conflict directly affects decreased personal accomplishment.
- H_{1.7}: Role ambiguity directly affects emotional exhaustion.
- H_{1.8}: Role ambiguity directly affects depersonalization.
- H_{1.9}: Role ambiguity directly affects decreased personal accomplishment.

2. Social support significantly moderates the relationships between stressors and teacher burnout.

To evaluate the second hypothesis, it was further divided into following nine sub-hypotheses:

- H_{2.1}: Social support significantly moderates the relationship between role overload and emotional exhaustion.
- H_{2.2}: Social support significantly moderates the relationship between role overload and depersonalization personal.
- H_{2.3}: Social support significantly moderates the relationship between role overload and decreased personal accomplishment.
- H_{2.4}: Social support significantly moderates the relationship between role conflict and emotional exhaustion.
- H_{2.5}: Social support significantly moderates the relationship between role conflict and depersonalization personal.
- H_{2.6}: Social support significantly moderates the relationship between role conflict and decreased personal accomplishment.
- H_{2.7}: Social support significantly moderates the relationship between role ambiguity and emotional exhaustion.
- H_{2.8}: Social support significantly moderates the relationship between role ambiguity and depersonalization personal.
- H_{2.9}: Social support significantly moderates the relationship between role ambiguity and decreased personal accomplishment.

METHODOLOGY

Research Design

This study is intended to examine the role of contribution of stressors to teacher burnout. To achieve this goal, a correlational study was conducted. Generally, the correlational design is used to describe and measure – the degree of relationship between two or more variables. The hypothesized model includes: three exogenous variables (i.e., role overload, role ambiguity, and role conflict) and three endogenous variables (i.e., emotional exhaustion, depersonalization, and decreased personal accomplishment). A model specified in Structural Equation Model (SEM) is characterized by multiple and interrelated dependence relationships, which can be estimated concurrently using SEM (Kaplan, 2008).

Sample

Data were collected by a 68-item digital countrywide survey questionnaire delivered through email to all special education teachers. The overall response rate was 48%. Where the samples consisted of 202 teachers (61% female and

39% male) from 13 districts in the Kingdom of Saudi Arabia (KSA). The mean score of participants' ages is 29.35. Given the sample properties (i.e., geographic location), we assume that the sample represents a proper estimate of special education teachers.

Instrument

The questionnaire includes demographic information section (location, age, gender, and teaching experience), Maslach Burnout Inventory-Educators Survey (MBI-ES), Multidimensional Scale of Perceived Social Support, role conflict scale, role ambiguity scale, role conflict scale, and finally, the role overload scale.

Maslach Burnout Inventory-Educators Survey (MBI-ES) developed by Maslach (1996) was adapted to assess the level of burnout among special education teachers in Saudi Arabia. MBI-ES includes 22 items distributed on three subscales, namely emotional exhaustion (EE) (sample item: I like to daydream), depersonalization personal (DP), and personal accomplishment (PA). The MBI-ES employs a 7-point Likert-type scale with frequency anchors ranging from 0 (never) to 6 (every day). The items of personal accomplishment subscale are reverse scored. As such, higher scores on the three dimensions are indicative of a higher level of burnout. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) confirmed the three-dimensions of MBI-ES. Cronbach alpha for the three dimensions are: .77, .79, and .75, for emotional exhaustion, depersonalization, and decreased personal accomplishment, respectively.

Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988) was adapted to assess special education teacher's perceptions about Perceived Social Support (PSS). MSPSS focuses on twelve items distributing in three subscales, namely Family, Friends, and Significant Other. MSPSS employs a 4-point Likert-type scale with frequency anchors ranging from 1 (strongly disagree) to 4 (strongly agree). Higher scores of the three dimensions are indicative of a higher level of social support. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) confirmed the three dimensions of MSPSS. Cronbach alpha for the three dimensions are: .72, .71, and .74, for family, friends, and significant other, respectively.

Role ambiguity scale developed by Rizzo et al. (1970) was adopted to assess level of ambiguity among special education teachers in Saudi Arabia. Role ambiguity scale consists of six items, worded to simulate stressful conditions perceived in the role such as: "The explanation is clear of what has to be done". Teachers rate the items along a 4-point Likert-type scale with frequency anchors ranging from 1 (never) to 4 (always true). Summed scores for role ambiguity scores are 6 to 24. High scores indicate higher levels of role ambiguity. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) confirmed a one factor model of the scale. The Cronbach alpha for the scale is .82.

Role conflict scale developed by Rizzo et al. (1970) was adopted to assess role conflict of special education teachers in Saudi Arabia (KSA). The Role Conflict Scale comprises nine items worded to simulate stressful conditions perceived in the role, such as: "I have to work under vague directions or orders". Teachers rate the items along a four-point Likert-type scale with frequency anchors ranging from 1 (never) to 4 (always true). Summed scores for role conflict scores are 9 to 36. High ratings indicate higher levels of role conflict. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) confirmed a one factor model of the scale. The Cronbach alpha for the scale is .84.

Role overload scale (RO) developed by Reilly (1982) consists of 13 items and was adopted in the Saudi context. The scale uses a 4-point Likert-type scale with frequency anchors ranging from 1 (strongly disagree) to 4 (strongly agree). Examples of items include: "I seem to have to overextend myself in order to be able to finish everything I have to do". Summed scores for role overload scores are 13 to 52. High scores indicate higher levels of role overload. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) confirmed a one factor model of the scale. The Cronbach alpha for the scale was .84.

RESULTS

Table 1 depicts the means, standard deviations, skewness, and kurtosis of the seven variables included in the model. Results of the means showed that teachers exhibited high levels of emotional exhaustion, depersonalization, decreased personal accomplishment, perceived social support, and role overload, but low level of role conflict and role ambiguity. Since the absolute values of skewness coefficients are less than one, the data of the seven variables approached to normal (Gliner, Morgan, & Leech, 2011; Owen et al., 2011).

Table 1
Descriptive Statistics for the Six Latent Variables

Variable	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
EE	3.141	.983	-.290	.169	.512	.338
DP	2.741	.137	-.256	.169	-.442	.338
PA	3.011	.231	-.367	.169	-.421	.338
RO	2.954	.963	-.126	.169	.323	.338
RC	2.123	.222	-.172	.169	-.125	.338
RA	2.175	.970	-.375	.169	.542	.338
SO	3.106	.356	.543	.169	.445	.338

Table 2 depicts the correlation matrix for the six variables included in the model. Results of the correlation examination showed that role conflict, role overload, role ambiguity, emotional exhaustion, depersonalization, and decreased personal accomplishment were positively and significantly related to each other ($p < 0.01$ for the six variables), whereas, social support was negatively and significantly related to stressors (i.e., role conflict, role overload, and role ambiguity) and the three dimensions of burnout (i.e., emotional exhaustion, depersonalization, and decreased personal accomplishment). In other words, there exists a significant positive relationship between stressors and teacher's burnout. As such, the increase in the three stressors had led to the increase in each dimension of burnout.

Table 2
Inter-Correlations Coefficient of the Latent Variables

Variable	EE	DP	PA	RO	RC	RA
DP	.639**	1				
PA	.432**	.583**	1			
RO	.490**	.569**	.475**	1		
RC	.609**	.495**	.332**	.481**	1	
RA	.554**	.453**	.601**	.412**	.561**	.367**
SO	-.376**	-.474**	-.387**	-.416**	-.490**	-.432**

The measurement model of the present study has been run including exogenous variables (i.e., role conflict, role ambiguity, and role overload) and endogenous variables (i.e., emotional exhaustion, depersonalization, and decreased personal accomplishment). The model indicates absolute model fit, $CMIN/df = 2.760$, which is below the cut-off value (3.0; $p > 0.05$) (Kline, 2005). Other fit indices, $AGFI = .951$, $GFI = .962$, $TLI = .961$, $CFI = .955$, are all above the threshold value of .95. Furthermore, the $RMSEA$ of 0.052 is lower than the threshold value (.06). As such the data is a good fit for the structural model.

The significance of path coefficients values (*Beta* values) using *t*-values were tested. As shown in Table 3, role overload has direct positive significant effects on emotional exhaustion ($\beta = .606$, $t = 7.720$, $p < 0.01$), depersonalization ($\beta = .329$, $t = 4.416$, $p < 0.01$), and decreased personal accomplishment ($\beta = .737$, $t = 19.875$, $p < 0.01$). Role ambiguity has direct positive significant effects on emotional exhaustion ($\beta = .202$, $t = 2.765$, $p < 0.01$), depersonalization ($\beta = .155$, $t = 2.232$, $p < 0.05$), and decreased personal accomplishment ($\beta = .204$, $t = 4.635$, $p < 0.01$). Finally, role conflict has direct positive significant effects on depersonalization ($\beta = .439$, $t = 5.551$, $p < 0.01$) and decreased personal accomplishment ($\beta = .180$, $t = 3.596$, $p < 0.01$), whereas no significant direct effect

of role conflict was found on emotional exhaustion ($\beta = .094, t = 5.551, p > 0.05$). In general, the findings support $H_{1.1}, H_{1.2}, H_{1.3}, H_{1.5}, H_{1.6}, H_{1.7}, H_{1.8}$ and H_{19} hypotheses, whereas, our results failed to support H_{14} hypothesis.

Based on the path analysis, exogenous variables (i.e., emotional exhaustion, depersonalization, and decreased personal accomplishment) account for 78.9% (high effect) of decreased personal accomplishment variance, 78.4% (high effect) of depersonalization variance, and 75.9% (high effect) of emotional exhaustion variance.

Table 3
Summary Results of Path Analysis (Direct Effect)

			Estimate	S.E.	Beta	C.R.	<i>p</i>
RO	→	EE	.555	.072	.606	7.720	***
RO	→	DP	.331	.075	.329	4.416	***
RO	→	PA	.921	.046	.737	13.875	***
RA	→	EE	.184	.067	.202	2.765	.006
RA	→	DP	.155	.069	.155	2.232	.026
RA	→	PA	.199	.043	.204	4.635	***
RC	→	EE	.086	.076	.094	1.128	.259
RC	→	DP	.440	.079	.439	5.551	***
RC	→	PA	.176	.049	.180	3.596	***

Moderated effect exists when the relationship between two continuous variables varies depending on the value of a third dichotomous categorical variable. In other words, a moderated relationship exists if the relationship between the predictor and the criterion is different for both levels of the moderator. The moderation effects of social support (SO) on the relationships between the three stressors and teacher burnout dimensions were examined by including an interaction effect (i.e., the interaction between the moderator and the predictor) in the model and checking the significance of the interaction on the criterion variable. If the interaction term is significant, the moderated effect has been existed (Aiken & West, 1991; Baron & Kenny, 1986; Jaccard & Turrisi, 2003). In general, our results failed to support $H_{2.1}, H_{2.2}, H_{2.3}, H_{2.4}, H_{2.5}, H_{2.6}, H_{2.7}, H_{2.8}$ and $H_{2.9}$ hypotheses.

The moderation effects of social support (SO) on the relationship between stressors (i.e., role overload, role ambiguity, and role conflict) and the three dimensions of burnout (i.e., emotional exhaustion, depersonalization, and decreased personal accomplishment) were examined and presented in Table 4. Furthermore, the path coefficient was used to evaluate the contribution of each interaction term on the three dimensions of burnout. As shown in Table 2, the

interaction terms of social support with the three stressors were non-significant. Accordingly, no moderation effects were observed for social support on the relationship between the three stressors and burnout dimensions.

Table 4
The Moderation Effect of Social Support on Stressors-Burnout Linkage

Interaction	Path	Dependent Variable	Beta	S. E	t-value	p	Decision
SO*RO	→	EE	.014	.035	-1.099	> .05	No Moderation effect
SO*RO	→	DP	.034	.025	1.282	> .05	No Moderation effect
SO*RO	→	PA	.043	.022	1.275	> .05	No Moderation effect
SO*RC	→	DP	-.039	.065	-.610	> .05	No Moderation effect
SO*RC	→	PA	-.041	.065	-.613	> .05	No Moderation effect
SO*RA	→	EE	-.002	.081	-.039	> .05	No Moderation effect
SO*RA	→	DP	.028	.070	.614	> .05	No Moderation effect
SO*RA	→	PA	.042	.078	.844	> .05	No Moderation effect

DISCUSSION

The present study has two main research objectives. The first objective was to investigate whether role ambiguity, role overload, role conflict directly affect teacher burnout. To test the predictive ability of the hypothesized model of teacher's burnout, two main (divided into eighteen sub hypotheses) hypotheses were evaluated using SEM. Accordingly, eight out of eighteen hypotheses were supported in the results of the current study. The results indicated that among special teachers, dimensions of burnout (i.e., emotional exhaustion, depersonalization, and decreased personal accomplishment) are related to role stressors (i.e., role overload, role conflict, and role ambiguity).

Descriptive statistics revealed that teachers exhibited a high level of emotional exhaustion, depersonalization, and decreased personal accomplishment. These results could be attributed to the situation that special education teachers in Saudi Arabia are at risk of experiencing feelings of burnout

(Atiyat, 2017). Teachers' emotional exhaustion might be attributed to multiple job demands, including: coordinate educational counsellor in order to identify the case and the need for joining a special resource room, parent conferences, large caseloads, paperwork, conduct assessment to determine a student's level of academic achievement, measure the forms of disabilities and coordinate regular classes with parents, and school administrators such as substitute teaching (Hinds, Jones, Gau, Forrester, & Biglan, 2015; McCarthy & Lambert, 2008). Furthermore, this result could be attributed to the school job environment, where the job demands are high, but the resources to meet those demands are low (Langher et al., 2017; Xu, 2019), and increase susceptibility to experience burnout. This result supported the results of several studies in Saudi Arabia (KSA); for instance, Atiyat (2017) and Alaraideh Emad (2016) found that special education teachers had an average level of burnout.

Participants reported a high level of role overload. As such, we can conclude that special education teachers in Saudi Arabia have too many tasks with insufficient time to complete them, not having sufficient resources, performing tasks without training, taking work home, increased job responsibilities, and doing more work than reasonable. In contrast, participants reported low levels of role ambiguity and conflict. These results could be attributed to the fact that special education teachers in Saudi Arabia are clear about the duties and procedures required in their jobs and they believe that their expectations and demands are compatible and can be satisfied at the same time. These results seem to be inconsistent with the findings from past studies (e.g., Beebe, 2018; Casteel, 2018; Langher et al., 2017; Maslach et al., 2001). The authors reported that there are high stressors and burnout among general and special education teachers.

The correlation analysis revealed that three stressors are positively related to the three dimensions of burnout. Furthermore, path analysis results revealed that role overload and role ambiguity had shown significant positive direct effects on the three dimensions of burnout. It was observed that role conflict had a significant positive direct effect on depersonalization and decreased personal accomplishment. In contrast, role conflict had a non-significant direct effect on emotional exhaustion. Several studies revealed that role overload, role ambiguity, and role conflict were contributing factors to teacher burnout (Ahmed et al., 2013; Kumar & Kamalanabhan, 2017; Moss, 2015; L. Xu, 2019; Yürür & Sarikaya, 2012). The individual experiences stress without adequate resources for coping, may face the strain, exhaustion, and attitudinal change and burnout (Maslach, 1982). Therefore, the findings may indicate a probability that special education teachers are experiencing burnout as a consequence of role ambiguity and role conflict (Embich, 2001; Schwab & Iwanicki, 1981; Wasburn-Moses, 2009). As mentioned earlier, there exists a positive significant relationship between role conflict and emotional exhaustion. However, based on the model, role conflict has no direct effects on teacher burnout. With that, further studies are required to indicate the direct effect of role conflict on emotional exhaustion.

Our findings are supported by several previous studies (e.g., Ahmed, Sultana, Paul, & Azeem, 2013; Cahill, McNamara, Pitt-Catsouphes, & Valcour, 2015; Caputo & Langher, 2015; Gibson, Grey, & Hastings, 2009; Li, Ruan, & Yuan, 2015; Xu, 2019; Kumar & Kamalanabhan, 2017; Langher et al., 2017; Langher, Ricci, Propersi, Glumbic, & Caputo, 2016; Mohammad Azeem, 2010; Moss, 2015; Peng et al., 2016). In addition, our findings are in line with the role stress theory (Kahn et al., 1964). The role stress theory assumes that organizational factors generate role expectations among role transmitters, who then transmit these as role pressures to the individual. Long and experienced pressure generates ill-health symptoms (Kahn et al., 1964). As such, teachers who experience high level of stressors exhibited a high level of burnout.

With respect to the moderation effect of social support on the relationship between stressors and teacher burnout, our results revealed that social support had a non-significant moderation effect on the relationship between the three stressors and the three dimensions of burnout. These results failed to support the social support model (Halbesleben, 2006). Based on the social support model, the use of social support significantly reduces levels of job-related stress or burnout. Regarding the school context, teachers with good social support are more likely to remain teaching, showing more career satisfaction and less burnout (Pomaki et al., 2010). Researchers have proposed several different mechanisms for understanding the relationship between social support and burnout (T A Beehr, 1985). The dominant hypothesis has been a “buffering effect,” whereby social support interacts with a stressor to predict strain (Ganster et al., 1986). Thus, further studies are needed to justify the moderation effect of social support on the stressors-burnout link.

IMPLICATIONS OF THE STUDY

This study provided empirical research that investigated the direct effect of three stressors on teacher burnout. The results of our study add several important theoretical contributions to the existing knowledge about stressors- burnout association among special education teachers. The results could have an effective effect to build mentoring programs for teachers to curb this phenomenon. School sites and principals can consider the solutions recommended based on the results of this study as an additional effort to improve special education teacher performance and motivation. School principals can apply these results to make additional effort to highlight the achievements of special education teachers. Hence, the effect of burnout can be minimized as higher personal achievement reduces the effect of emotional exhaustion (Maslach et al., 1986).

The current study encourages other researchers to conduct more research related to factors predicting teacher burnout to deepen understanding of the association between stressors and teacher burnout. The results suggest the

need to develop practice and policy considerations for reducing burnout risks among special education teachers to improve education quality (Kwakman, 2001). Effective management leaders can benefit from the output of the present study, by supporting teachers and developing their leadership abilities by creating a strong collaborative and creative work environment. Developing special education teachers' own strategies and practicing beneficial skills such as task-oriented coping skills may be helpful in decreasing their likelihood of burnout. As teacher overload is positively related to burnout, school administrators must employ a sufficient number of special education teachers to ensure that students with special needs receive quality services and that special teachers have a manageable case load. Findings from this study will help administrators combat the issue of special education burnout, attrition, and turnover.

CONCLUSION

The focus of this study was to provide quantitative evidence regarding the statistically significant relationship between stressors (i.e., role overload, role conflict & role ambiguity) as predictors of burnout, as measured by the MBI-ES instrument among special education teachers in Saudi Arabia. The results of this study provided evidence that role overload and role ambiguity had significant effects on the three dimensions of burnout in special education teachers. Role conflict had significant effects on decreased personal accomplishment and depersonalization in special education teachers. Lastly, there were no moderation effects for social support on the relationship between stressors and the three dimensions of burnout. The results of our study support the results of past studies that showed an important relationship between stressors and teacher burnout. However, the present study failed to support the moderation effect of social support on the relationship between stressors and burnout. Hence, further studies are needed for a better understanding of the moderation effect of perceived social support on the relationship between stressors and the three dimensions of burnout.

REFERENCES

- Ahmed, I., Sultana, I., Paul, S. K., & Azeem, A. (2013). Employee performance evaluation: a fuzzy approach. *International Journal of Productivity and Performance Management*, 62(7), 718–734.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Thousand Oaks, CA: Sage.

- Alaraideh Emad. (2016). Burnout level among Special education teachers. *Journal of Psychology and Educational Sciences*, 2, 197–227.
- Atiyat, O. K. (2017). The Level of Psychological Burnout at the Teachers of Students with Autism Disorders in Light of a Number of Variables in Al-Riyadh Area. *Journal of Education and Learning*, 6(4), 159–174.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Bataineh, O., & Alsagheer, A. (2012). An investigation of social support and burnout among Special Education teachers in the United Arab Emirates. *International Journal of Special Education*, 27(2), 5–13.
- Beebe, J. (2018). Special education teacher perception of administrative supports that encourage, decrease burnout, and reduce attrition. In *ERIC* (Vol. 79, Issues 2-A(E)). <https://eric.ed.gov/?id=ED580051>
- Beehr, T. A. (1985). The role of social support in coping with organizational stress. In *Human stress and cognition in organizations An integrated perspective* (pp. 375–398). <https://ci.nii.ac.jp/naid/10013239829/>
- Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, 38(1), 39–55.
- Brown, L. A., & Roloff, M. E. (2011). Extra-role time, burnout, and commitment: The power of promises kept. *Business Communication Quarterly*, 74(4), 450–474.
- Cahill, K. E., McNamara, T. K., Pitt-Catsoupes, M., & Valcour, M. (2015). Linking shifts in the national economy with changes in job satisfaction, employee engagement and work–life balance. *Journal of Behavioral and Experimental Economics*, 56, 40–54.
- Cancio, E. J., Albrecht, S. F., & Johns, B. H. (2013). Defining administrative support and its relationship to the attrition of teachers of students with emotional and behavioral disorders. *Education and Treatment of Children*, 71–94.
- Caputo, A., & Langher, V. (2015). Validation of the collaboration and support for inclusive teaching scale in special education teachers. *Journal of Psychoeducational Assessment*, 33(3), 210–222.
- Casteel, C. L. (2018). *The relationship between Certification Type and Burnout, Perceived Support, Job Satisfaction, and Life Satisfaction in Special Education Teachers*. Texas A&M University-Commerce.
- Cha, S.-H., & Cohen-Vogel, L. (2011). Why they quit: A focused look at teachers who leave for other occupations. *School Effectiveness and School Improvement*, 22(4), 371–392.
- Chang, M.-L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, 21(3), 193–218.

- Clays, E., De Bacquer, D., Leynen, F., Kornitzer, M., Kittel, F., & De Backer, G. (2007). Job stress and depression symptoms in middle-aged workers: Prospective results from the Belstress study. *Scandinavian Journal of Work, Environment & Health, 33*(4), 252–259.
- Conley, S., & Woosley, S. A. (2000). Teacher role stress, higher order needs and work outcomes. *Journal of Educational Administration, 38*(2), 179–201.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of Management Review, 18*(4), 621–656.
- Demaray, M. K., Malecki, C. K., Davidson, L. M., Hodgson, K. K., & Rebus, P. J. (2005). The relationship between social support and student adjustment: A longitudinal analysis. *Psychology in the Schools, 42*(7), 691–706.
- Embich, J. L. (2001). The relationship of secondary special education teachers' roles and factors that lead to professional burnout. *Teacher Education and Special Education, 24*(1), 58–69.
- Freudenberger, H. J. (1977). Burn-out: The organizational menace. *Training & Development Journal, 32*.
- Ganster, D. C., Fusilier, M. R., & Mayes, B. T. (1986). Role of social support in the experience of stress at work. *Journal of Applied Psychology, 71*(1), 102–110.
- Ghanizadeh, A., & Jahedizadeh, S. (2015). Teacher burnout: A review of sources and ramifications. *Journal of Education, Society and Behavioural Science, 24–39*.
- Gibson, J. A., Grey, I. M., & Hastings, R. P. (2009). Supervisor Support as a Predictor of Burnout and Therapeutic Self-Efficacy in Therapists Working in ABA Schools. *Journal of Autism and Developmental Disorders, 39*(7), 1024–1030. <https://doi.org/10.1007/s10803-009-0709-4>
- Gilmour, A. F., & Wehby, J. H. (2019). The association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology, 112*(5), 1042.
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2011). *Research methods in applied settings: An integrated approach to design and analysis*. Routledge.
- González-Romá, V., & Lloret, S. (1998). Construct validity of Rizzo et al.'s (1970) Role Conflict and Ambiguity Scales: A multisample study. *Applied Psychology: An International Review*.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*(6), 495–513. <https://doi.org/10.1016/j.jsp.2005.11.001>
- Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology, 91*(5), 1134–1145. <https://doi.org/10.1037/0021-9010.91.5.1134>
- Hinds, E., Jones, L. B., Gau, J. M., Forrester, K. K., & Biglan, A. (2015). Teacher distress and the role of experiential avoidance. *Psychology in the Schools, 52*(3), 284–297.

- Ivancevich, J. M., & Matteson, M. T. (1980). *Stress and work: A managerial perspective*. Scott Foresman.
- Jaccard, J., & Turrisi, R. (2003). Two-Way Interactions. *Interaction Effects in Multiple Regression*. (2nd Ed., Pp. 17-44). Thousand Oaks, CA: Sage.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525.
- Kaff, M. S. (2004). Multitasking Is Multitaxing: Why Special Educators Are Leaving the Field. *Preventing School Failure*, 48(2), 10-17. <http://search.proquest.com/openview/ceea6537f1acb0297f88a56b10c1d338/1?pq-origsite=gscholar&cbl=16028>
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: Wiley.
- Kaplan, D. (2008). *Structural equation modeling: Foundations and extensions* (Vol. 10). Thousand Oaks, CA: Sage.
- Karasek, R. A. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, 24(2), 285. <https://doi.org/10.2307/2392498>
- Katz, D., & Kahn, R. L. (1966). *The Social Psychology of Organizations*. New York, NY: Wiley.
- Keigher, A. (2010). Teacher Attrition and Mobility: Results from the 2008-09 Teacher Follow-Up Survey. First Look. NCES 2010-353. National Center for Education Statistics.
- Kelloway, E. K., & Barling, J. (1990). Item content versus item wording: Disentangling role conflict and role ambiguity. *Journal of Applied Psychology*, 75(6), 738.
- Klassen, R. M., Usher, E. L., & Bong, M. (2010). Teachers' Collective Efficacy, Job Satisfaction, and Job Stress in Cross-Cultural Context. *The Journal of Experimental Education*, 78, 464–486. <https://doi.org/10.1080/00220970903292975>
- Kline, T. (2005). *Psychological testing: A practical approach to design and evaluation*. Thousand Oaks, CA: Sage.
- Kucuksuleymanoglu, R. (2011). Burnout Syndrome Levels of Teachers in Special Education Schools in Turkey. *International Journal of Special Education*, 26(1), 53–63.
- Kukla-Acevedo, S. (2009). Leavers, movers, and stayers: The role of workplace conditions in teacher mobility decisions. *The Journal of Educational Research*, 102(6), 443–452.
- Kumar, V., & Kamalanabhan, T. J. (2017). Moderating role of work support in stressor–burnout relationship: An empirical investigation among police personnel in India. *Psychological Studies*, 62(1), 85–97.

- Kwakman, K. (2001). Work stress and work-based learning in secondary education: Testing the Karasek model. *Human Resource Development International*, 4(4), 487–501.
- Langher, V., Caputo, A., & Ricci, M. E. (2017). The potential role of perceived support for reduction of special education teachers' burnout. *International Journal of Educational Psychology*, 6(2), 120–147.
- Langher, V., Ricci, M. E., Propersi, F., Glumbic, N., & Caputo, A. (2016). Inclusion in Mozambique: a case study on a cooperative learning intervention/La inclusion en Mozambique: un estudio de casos sobre una intervencion de aprendizaje cooperativo. *Cultura y Educación*, 28(1), 42–71.
- Lee, C., & Schuler, R. S. (1980). Goal specificity and difficulty and leader initiating structure as strategies for managing role stress. *Journal of Management*, 6(2), 177–187.
- Lee, R. T., & Ashforth, B. E. (1990). On the meaning of Maslach's three dimensions of burnout. *Journal of Applied Psychology*, 75(6), 743.
- Li, L., Ruan, H., & Yuan, W.-J. (2015). The relationship between social support and burnout among ICU nurses in Shanghai: A cross-sectional study. *Chinese Nursing Research*, 2(2–3), 45–50.
- Lue, B.-H., Chen, H.-J., Wang, C.-W., Cheng, Y., & Chen, M.-C. (2010). Stress, personal characteristics and burnout among first postgraduate year residents: a nationwide study in Taiwan. *Medical Teacher*, 32(5), 400–407.
- Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly*, 18(3), 231.
- Maslach, C. (1982). Understanding burnout: Definitional issues in analyzing a complex phenomenon. *Job Stress and Burnout*, 29–40.
- Maslach, C. (1996). Maslach Burnout Inventory-Educators Survey (MBI-ES). En C. Maslach, SE Jackson & MP Leiter. *MBI Manual*.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422.
- McCarthy, C. J., & Lambert, R. G. (2008). Counselor appraisal of resources and demands. *Charlotte, NC: Center for Educational Measurement and Evaluation*.
- Mohammad Azeem, S. (2010). Personality hardiness, job involvement and job burnout among teachers. In *International Journal of Vocational and Technical Education* (Vol. 2, Issue 3). <http://www.academicjournals.org/IJVTE>
- Moss, C. L. (2015). *Role conflict and role ambiguity as predictors of burnout in special and general education co-teachers*.

- Müller, K., Alliata, R., & Benninghoff, F. (2009). Attracting and retaining teachers: A question of motivation. *Educational Management Administration & Leadership*, 37(5), 574–599.
- Owen, J., Leach, M. M., Wampold, B., & Rodolfa, E. (2011). Client and therapist variability in clients' perceptions of their therapists' multicultural competencies. *Journal of Counseling Psychology*, 58(1), 1.
- Pan, B., Shen, X., Liu, L., Yang, Y., & Wang, L. (2015). Factors associated with job satisfaction among university teachers in northeastern region of China: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 12(10), 12761–12775.
- Peiró, J. M., González-Romá, V., Tordera, N., & Mañas, M. A. (2001). Does role stress predict burnout over time among health care professionals? *Psychology & Health*, 16(5), 511–525.
- Peng, J. I. A. X. I., Li, D., Zhang, Z., Tian, Y. U., Miao, D., Xiao, W. E. I., & Zhang, J. (2016). How can core self-evaluations influence job burnout? the key roles of organizational commitment and job satisfaction. *Journal of Health Psychology*, 21(1), 50–59. <https://doi.org/10.1177/1359105314521478>
- Pomaki, G., DeLongis, A., Frey, D., Short, K., & Woehrle, T. (2010). When the going gets tough: Direct, buffering and indirect effects of social support on turnover intention. *Teaching and Teacher Education*, 26(6), 1340–1346. <https://doi.org/10.1016/j.tate.2010.03.007>
- Reilly, M. D. (1982). Working wives and convenience consumption. *Journal of Consumer Research*, 8(4), 407–418.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 150–163.
- Ruble, L., & McGrew, J. H. (2013). Teacher and child predictors of achieving IEP goals of children with autism. *Journal of Autism and Developmental Disorders*, 43(12), 2748–2763.
- Ryan, S. V., Nathaniel, P., Pendergast, L. L., Saeki, E., Segool, N., & Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education*, 66, 1–11.
- Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Social support: An interactional view*. New York, NY: Wiley.
- Schaubroeck, J., Cotton, J. L., & Jennings, K. R. (1989). Antecedents and consequences of role stress: A covariance structure analysis. *Journal of Organizational Behavior*, 10(1), 35–58.
- Schaufeli, W. B., Maslach, C., & Marek, T. (1993). The future of burnout. *Professional Burnout: Recent Developments in Theory and Research*, 253–259.
- Schwab, R. L., & Iwanicki, E. F. (1981). *The effect of role conflict and role ambiguity on perceived levels of teacher burnout*. Paper presented at the Annual Meeting of the American Educational Research Association, Los Angeles, California, April 1981.

- Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), 1059–1069. <https://doi.org/10.1016/j.tate.2009.11.001>
- Skaalvik, E. M., & Skaalvik, S. (2016). Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession. *Creative Education*, 7(13), 1785.
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology*, 3(4), 356.
- Van Maele, D., & Van Houtte, M. (2015). Trust in school: a pathway to inhibit teacher burnout? *Journal of Educational Administration*, 53(1), 93–115.
- Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, 47, 120–130.
- Wasburn-Moses, L. (2009). An Exploration of Pre-Service Teachers' Expectations for Their Future Roles. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 32(1), 5–16. <https://doi.org/10.1177/0888406408330865>
- Xu, L. (2019). Teacher-researcher role conflict and burnout among Chinese university teachers: A job demand-resources model perspective. *Studies in Higher Education*, 44(6), 903–919. <https://doi.org/10.1080/03075079.2017.1399261>
- Xu, Z., & Yang, F. (2018). The impact of perceived organizational support on the relationship between job stress and burnout: a mediating or moderating role? *Current Psychology*, 1–12.
- Yürür, S., & Sarikaya, M. (2012). The Effects of Workload, Role Ambiguity, and Social Support on Burnout Among Social Workers in Turkey. *Administration in Social Work*, 36(5), 457–478. <https://doi.org/10.1080/03643107.2011.613365>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multi-dimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30–41.