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Factors influencing burnout of the principals: a pilot study in Flemish schools of Belgium

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ABSTRACT

Burnout is a real problem with serious consequences for the health. Employees who work in stressful professions are more likely to suffer from burnout. The school principalship is one of these high-stress professions. It is characterised by overwhelming responsibilities, information confusion, and emotional anxiety. The purpose of this study is to examine common work-related stressors encountered by principals in Flemish schools of Belgium and assess their relative weight in terms of predicting school principal burnout. Using the survey method, 545 responses were collected from school principals of both primary and secondary schools. A structural equation modelling (SEM) was constructed to test both the reliability and validity of the measurement as well as the structural model. The study findings showed that role conflict, role ambiguity, and workload, along with some personal factors such as age and gender have significant and positive influences on burnout of principals.

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1. Introduction

Job burnout is a psychological syndrome characterised by a negative emotional reaction to one's job as a consequence of extended exposure to a stressful work environment (Maslach & Jackson, 1984). As can be understood from this definition, employees who work in stressful professions and/or workplaces are more likely to suffer burnout. Being a teacher is one of these high-stress professions. According to studies, a considerable number of teachers experience exhaustion symptoms during their careers (Chang, 2009; Farber, 1991). Although there is an abundance of studies which have investigated the job burnout of teachers and factors affecting it (Burke & Greenglass, 1995; Chan & Hui, 1995; Friedman, 2002; Jackson, Schwab, & Schuler, 1986; Kinman, Wray, & Strange, 2011; Näring, Briët, & Brouwers, 2006; Philipp & Schüpbach, 2010; Skaalvik & Skaalvik, 2007), there is a scarcity of research on the job burnout of school principals.

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Encountering the demands of multiple stakeholders at different levels such as children, teachers, adult employees, peers, parents, and supervisors/employers make school principalship a very stressful job and lead school principals to display extremely high levels of emotional arousal (Berkovich & Eyal, 2015). However, as was mentioned in Maslach and Leiter's (2005) burnout definition, being assigned meaningless and excessive duties causes lethargy and a lack of enthusiasm, which can lead principals to feel defeated and exhausted. Friedman (2002) also reported that frequent interactions with staff and parents positively affected their burnout levels. Principals with burnout symptoms can display turnover intention, poor job performance, and absenteeism (Freudenberger, 1975).

One of the countries which has seen an increase in the burnout of school principals is Belgium, particularly the Flanders region of Belgium. In the last four years, the number of the school principals who decided to leave their position due to burnout syndrome has increased. This number reached its peak in 2017, 1.119 out of 2.872 school principals resigned from school principalship (Van Den Eynde, 2017). The Flemish Ministry of Education had to find new school principals to fill these positions. Because of these severe consequences of burnout, it has become vital to carry out research about how to decrease, or prevent, the likelihood of job burnout and also to determine the main factors of burnout of school principals in Flanders. Therefore, the purpose of this study is to examine the impacts of personal variables, role conflict, role ambiguity, and workload on burnout of school principals at Flemish primary and secondary schools in Belgium.

2. Theoretical background and hypotheses development

2.1. Burnout

Job burnout is 'a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do "people work" of some kind' (Maslach & Jackson, 1981, p. 99). The initial research on burnout was conducted – by interviews, surveys and field observations – with individuals who work in the human services professions (Maslach & Jackson, 1982, 1984). However, burnout has become a global phenomenon; it is recognised as an influence experienced by individuals in a wide range of occupations (Schaufeli, Bakker, & Van Rehen, 2009). The following definition of burnout reflects its more general form: 'a state of exhaustion in which one is cynical about the value of one's occupation and doubtful of one's capacity to perform' (Maslach, Jackson, & Leiter, 1996, p. 20). In Maslach and Jackson's (1986) widely accepted conceptualisation, burnout was considered to be composed of the three dimensions of emotional exhaustion, depersonalisation and reduced personal accomplishment. Emotional exhaustion, which is a key aspect of burnout syndrome, refers to feelings of extreme emotional fatigue from the job. Depersonalisation is characterised by detachment and an emotional callousness towards others. Reduced personal accomplishment refers to feeling ineffective on the job, resulting in low motivation and self-esteem (Cordes & Dougherty, 1993). Maslach and Jackson (1984) theorised that each of these dimensions were independent of each other and could occur at any time.

Furthermore, in one of the recent definitions, burnout is described as a psychological response to chronic exposure to emotionally-demanding job demands (Maslach, Schaufeli, & Leiter, 2001). School principals are subject to many demands. The demands made principals largely involve emotionally-charged relationships with students and parents (Flowers, 2004; Herman & Marlowe, 2005; Liu & Li, 2005; Maddox, 1998; Weber, Welte, & Lederer, 2005; Whitaker, 1996). So, they feel drained and exhausted. Therefore, the prevalence of burnout in school has been found to be particularly high relative to other professions (Dinc et al., 2019; Greenglass, Burke, & Fiksenbaum, 2001). Principal burnout has been identified as a significant source of career dissatisfaction and, in turn, job and career turnover (Aiken, Clarke, & Sloane, 2002; Leiter & Maslach, 2009). In this regard, over the past three decades, an integrated model of burnout suggests relationships between likely antecedents and outcomes of burnout and burnout with its dimensions (Byrne, 1994). This study focuses on the relationships between likely antecedents and personal factors and burnout of principals.

2.2. Role conflict, role ambiguity, workload, and personal factors

In the literature, the sources of managerial stress were classified in two broad categories: internal factors and factors external to the organisation (Cooper & Marshall, 1978). The five major internal sources of managerial stress were shown as follows: (1) relations with others (poor relations with supervisors, colleagues, and subordinates); (2) organisational structure and climate; (3) career development (over- and under-promotion, lack of job security); (4) role in organisation (role conflict, role ambiguity, responsibility for people); and (5) factors intrinsic to the job (too much, or too little, work, poor physical working conditions, time pressure, decision-making). The external sources of managerial stress were identified as company versus family demands and company versus own interests. In a more recent study, Borg and Riding (1993) determined four major sources of stress among school administrators: (1) lack of support and need to resolve conflict; (2) inadequate resources; (3) workload; and (4) work conditions and responsibilities. In similar with previous literature, Gaziel (1993) and Fogarty et al. (2000) found that among the major work stressors as contributing to school principal burnout, the following notable ones were identified by school principals: (1) workload; (2) role ambiguity; and (3) role conflict. Therefore, in the present study, three types of role stressors, namely role ambiguity, role conflict, and workload, that are identified as contributors to school principal's burnout in the literature (Borg & Riding, 1993; Cooper & Marshall, 1978; Fogarty et al., 2000; Gaziel, 1993) and personal factors are examined.

Role conflict implies the incompatibility in communicated expectations that influence perceived role performance (Rizzo, House, & Lirtzman, 1970). Namely, role conflict states that 'too many demands, or anticipation, make the situation harder to comply with the other' (Senatra, 1980, 595). It exists when an employee faces incompatible expectations such that compliance with one expectation would make it difficult or impossible to effectively comply with the other expectations (Kahn et al., 1964). An employee who notices inconsistencies between his/her written job

description and requests from a manager can be an example of role conflict (Low et al., 2001). As shown by previous studies, higher levels of role conflict are related to a high burnout of employees (Crawford, LePine, & Rich, 2010; Schwab & Iwanicki, 1982). Role conflict is a problem for school principals because they need to interact with different groups of people, including children, teachers, adult employees, peers, parents, and supervisors/employers who make different expectations and demands on their time. They also need to perform a variety of roles. When these role expectations are incompatible and conflicting, and principals do not have sufficient time and resources to fulfil these role expectations, they are likely to experience role conflict.

Role ambiguity occurs when an individual does not have clear information about the expectations of his or her role in the job or organisation (Rizzo et al., 1970; Tang & Chang, 2010). In other words, the employee's duties, responsibilities and the authorities have not been well defined, and the employee does not know exactly what the purpose of the work is (Baltas & Baltas, 2008; Jones, 2007). Similar to role conflict, role ambiguity was found to be associated with undesirable consequences, including burnout (Crawford et al., 2010; Schwab & Iwanicki, 1982). School principals are likely to experience role ambiguity when their role with regard to proper procedures to perform tasks and criteria for performance evaluations are not clearly defined (Miles & Perreault, 1976). Additionally, task load, job description and background characteristics, such as specialised training and tenure, were found as main resources of role ambiguity (Monahan, 1999).

Workload refers to the absolute amount of work required and the time frame in which work must be completed (Cooper et al., 2001). It occurs when work roles require more time and effort than an individual has for them, so the roles cannot be performed adequately (Greenhaus & Beutell, 1985; Markham & Bonjean, 1995). Maslach and Leiter (1997) mention that job burden is a function of productivity according to the organisation and regarded as time and energy according to the individual. This perspective is a different important factor in creating a balanced relationship with work in order to fulfill the task and finish it. If employees lack the skills, they will not complete the job in the specified time. When they perceive it, they talk about work. Therefore, time in the concept of workload is an important element. It is important in how much time and when the work is done. Previous studies have shown that workload or role overload is related to higher levels of strain, anxiety and depression (Cooper et al., 2001). Workload is an issue for school principals since they have an irregular schedule. They are expected to have high involvement in multiple work roles and, thus, they are likely to suffer from role overload.

Regarding personal characteristics, age, gender, marital status, educational status, and professional experience and the effects of such factors on burnout are presented in various studies (Etzion, 1987; Kim, Shin, & Umbreit, 2007; Lau, Yuen, & Chan, 2005; Lent & Schwartz, 2012). Additionally, gender differences which are related to burnout were examined by Etzion (1987) and found that across the professional board, women tend to burnout more frequently than men. The working ladies have more responsibilities after their work and this is a factor that triggers their exhaustion (Schaufeli & Enzmann, 1998).

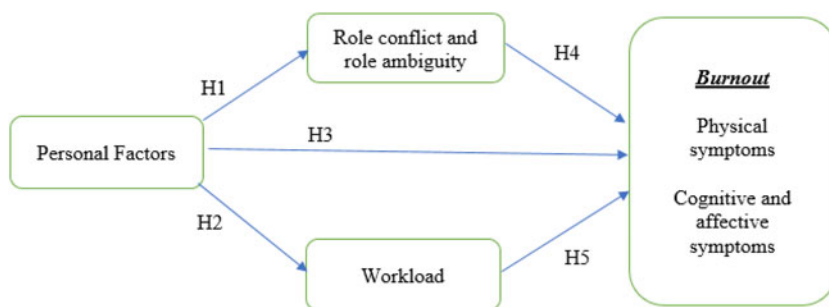


Figure 1. Research model.

2.3. Relationship among role conflict, role ambiguity, workload, personal factors, and burnout

In this study, the relationships among three role stressors (i.e., role ambiguity, role conflict, and workload) and personal factors among principals in Flemish schools of Belgium were examined. Drawing on the theoretical literature and available empirical evidence, these relationships were depicted in Figure 1. Several hypotheses have been derived from this conceptual framework.

Human service workers are particularly vulnerable to burnout (Freudenberger, 1974), probably because their work is characterised by frequent and intensive interpersonal contact. The personal factors studied in the context of schools were gender, age, and marital status. Previous research indicated that burnout was positively related to personal factors (Byrne, 1994; Friedman, 1996; Maslach, 1995). However, while role conflict is defined as inconsistencies between an employees' written job description and requests from his/her manager (Low et al., 2001), role ambiguity occurs when individuals have a lack of clear definition of their role expectations, and the methods to complete their tasks (Tang & Chang, 2010). As another role stressor, workload implies the absolute amount of required work and the time frame in which work must be completed (Cooper et al., 2001). Previous literature showed that role conflict, role ambiguity, and workload were positively correlated with burnout (Salahian et al., 2012). Personal variables were also positively related to role conflict, role ambiguity, and workload (Friedman, 1996; Maslach, 1995). Based on the literature above, the following hypotheses are suggested:

- Hypothesis 1: Personal factors of school principals have a significant and positive effect on role conflict and ambiguity.
- Hypothesis 2: Personal factors of school principals have a significant and positive effect on workload.
- Hypothesis 3: Personal factors of school principals have a significant and positive effect on burnout.
- Hypothesis 4: Role conflict and role ambiguity have a significant and positive effect on burnout.
- Hypothesis 5: Workload has a significant and positive effect on burnout.

3. Research model

4. Methodology

4.1. Sampling and procedures

The purpose of the study was to determine the factors that affect burnout level of principals in Flanders. For the purposes of this study, the sampling frame was limited to the Flanders region of Belgium. The total number of principals in 2016 who worked in schools of the Flemish Ministry of education was 5,372.

A three-page questionnaire with four sections was used to collect data for the study. The first section of the questionnaire consisted of 21 questions about burnout symptoms. The second section contained questions about role conflict and role ambiguity. The respondents completed the four questions in this part. The third section included questions about workload. The participants completed the two-item workload questions. Finally, the last section included nine demographic questions including personal factors such as age group, gender, marriage, education level of school principals, and questions about schools.

The questionnaire was prepared in English and then translated into Flemish using the conventional method of back-translation (Brinlin, Lonner, & Thorndike, 1973). The translation of the questionnaire was carried out by experts at a private school who knew both the languages and respective cultures. Any items that looked ambiguous or difficult to understand were rectified before distribution.

A pilot test was conducted with 30 principals (12 part-time and 18 full-time principals) on the initial survey questionnaire to identify possible issues with clarity and interpretation (Iraossi, 2006). Several minor modifications of the wording and the question item sequence were made based on the comments collected from these principals.

Data for this study were collected primarily using web-based surveys. A judgement sampling method was used to gather data and participation was voluntary. A total of 650 surveys constituting about 1/8 of the school principals in the Flanders region were distributed to the school principals who worked in primary and secondary schools. A total of 560 respondents returned surveys, of which 547 were usable, resulting in a response rate of 83%.

4.2. Measures and instrumentation

The questionnaire covered a variety of variables including measures of burnout, role conflict/ambiguity, workload, and demographic questions concerning aspects such as age group, gender, education level of principals, and information about their schools. In all scales, the questions were measured with a 5-point Likert scale, with scale anchors ranging from 1 = strongly disagree to 5 = strongly agree.

Maslach's burnout inventory (M.B.I.) (Maslach & Jackson, 1981) was used to measure cognitive, affective and physical burnout symptoms of principals. A principal's role conflict and ambiguity and workload were measured using Schaufeli and

Van Dierendonck's (1994) scale. Demographic questions were adapted from Friedman's 'Burnout Scale for Principals' (2002).

5. Results

The purpose of the study was to determine the factors that affect burnout level of principals in Flanders. Five hundred and forty-five usable surveys were collected from principals working in primary and secondary schools in Flanders. Participants in the present study were 547 full-time school principals in Flanders. Of these, 228 (41.83%) were male and 317 (58.17%) female. The average age was 49.9 years. A total of 397 (72.5%) were elementary school principals and 150 (27.5%) were secondary and DKO (Deeltijds Kunstonderwijs (Artistic education))-school principals. Demographic characteristics of the participants are shown in Table 1.

5.1. Initial analyses

Table 2 presents the mean, standard deviation, and Pearson's correlations for all variables in this study. A Principle Components Analysis (PCA) using varimax rotation was performed on each of the proposed scales to measure the three constructs used in this study. In addition, Confirmatory Factor Analysis (CFA) was performed on the items using AMOS 18.0. Maximum likelihood estimation was used and the covariances for the proposed factor models were analysed. Goodness-of-fit indices were investigated to determine the degree to which the models fit the data. Based on the results, while 12 emerged to assess cognitive and affective symptoms of the burnout variable, four items were retained to assess physical symptoms of burnout. Four items were retained with which to assess role conflict/ambiguity variable. Finally, two items were retained to assess the workload variable. While the exploratory factor analysis results for each scale and the coefficient alphas of each variable are shown in Tables 3, 4, and 5, CFA results for each scale are reported in Table 6.

The variables were tested in structural equation modelling (SEM). Structural model designed to test Hypotheses 1, 2, 3, 4, and 5 included three direct relationships: between personal variables and role conflict and role ambiguity; personal variables and workload; personal variables and burnout, role conflict and ambiguity and burnout, and workload and burnout.

The structural model was assessed using model parsimony and model fit analysis. The fit indexes for the model are presented in Table 6. The model yielded an overall chi-square value of 1.98 with RMSEA = 0.04 and CFI = 0.93, all of which are acceptable levels of model fit (Bryne, 2001).

5.1.2. *Path analysis of the relationship among 'personal variables, role conflict and role ambiguity, workload and burnout'* To test Hypothesis 1, personal variables regressed on role conflict and ambiguity. Table 6 and Figure 2 shows the paths estimates for the structural model. The direct relationships between 'personal variables' and 'role conflict/ambiguity' is not significant ($p > 0.005$), the 'personal variables' do not affect 'role conflict and role ambiguity'. So, this hypothesis is not supported.

Table 1. Demographic characteristics of participants.

Variables	Frequency	Valid per cent (%)
<i>Gender</i>		
Male	228	41.83
Female	317	58.17
<i>Age</i>		
25–30	4	0.73
31–35	17	3.12
36–40	50	9.17
41–45	73	13.39
46–50	110	20.18
51–55	151	27.71
56–60	130	23.85
>60	10	1.83
<i>Marital status</i>		
Married	476	87.34
Single	69	12.66
<i>No. of children</i>		
0	56	10.28
1	62	11.38
2	260	47.71
3	121	22.20
4	38	6.97
5	7	1.28
6	1	0.18
<i>Education level</i>		
Bachelor's degree	405	74.31
Master's degree	136	24.95
PhD	4	0.73
<i>Province</i>		
Antwerp	150	27.52
Brussels	21	3.85
Limburg	69	12.66
East Flanders	96	17.61
West Flanders	83	15.23
Flemish Brabant	126	23.12
<i>Educational Network</i>		
GO!	56	10.28
Publicly funded, publicly run education	139	25.50
Publicly funded, privately run schools	350	64.22
<i>Function</i>		
Principal	455	83.49
Deputy Principal	53	9.72
Managing Director	37	6.79
<i>School level</i>		
Nursery school	19	3.49
Primary school	29	5.32
Elementary school	317	58.17
Special needs elementary education	31	5.69
Secondary school	99	18.17
Special needs secondary education	16	2.94
D.K.O.	34	6.24

Note: $N = 545$; GO!:Gemeenschapsonderwijs (The official education organised by the Flemish Community); DKO:Deeltijds Kunstonderwijs (Artistic education).

In testing Hypothesis 2, personal variables regressed on workload. Table 6 and Figure 2 show the paths estimates for the structural model. The direct relationships between 'personal variables' and 'workload' is not significant ($p > 0.005$), the 'personal variables' do not affect 'workload'. So, this hypothesis is not supported.

To test Hypothesis 3, the personal factors regressed on the symptoms of burnout. The test shows the effect of personal factors on the symptoms for burnout in two

Table 2. Mean, standard deviations, and correlations.

	Mean	SD	1	2	3	4
(1) Physical symptoms	3.193	0.87	1			
(2) Cognitive and affective symptoms	2.787	0.73	0.707**	1		
(3) Role conflict/ambiguity	0.586	0.31	0.219**	0.311**	1	
(4) Workload	31.9	6.69	0.07	0.071	0.03	1

Note: * $p < 0.05$; ** $p < 0.01$.

categories: ‘physical symptoms’ and ‘cognitive and affective symptoms’. The significance value less than 0.05 are indicated in the Table 2. It means that there is no homogeneity in variance and that the personal variables have an effect on the symptoms for burnout. This hypothesis was partially supported. The following personal factors have influences on burnout: age and gender.

In testing Hypothesis 4, ‘role conflict/role ambiguity’ regressed on ‘burnout’. Table 6 and Figure 2 show the path estimates for the structural model. While the direct relationship between ‘role conflict and role ambiguity’ and ‘burnout’ was significant, the effect of ‘role conflict and role ambiguity’ on ‘burnout’ was significant ($p < 0.000$). The results indicate that ‘role conflict and role ambiguity’ has a positive and significant influence on ‘burnout’. However, the coefficients in the relationships between ‘role conflict and ambiguity’ and ‘burnout’ show their strong relationship. This hypothesis was supported.

In testing Hypothesis 5, ‘workload’ regressed on ‘burnout’. Table 6 and Figure 2 show the path estimates for the structural model. ‘The direct relationship between ‘workload’ and ‘burnout’ was significant, as was the effect of ‘workload’ on ‘burnout’ ($p < 0.000$).’ However, the coefficients in the relationships between ‘workload’ and ‘burnout’ show their strong relationship. This hypothesis was supported.

6. Discussion

We studied the effects of personal variables, role conflict, role ambiguity, and workload on the burnout of school principals at Flemish primary and secondary schools in Belgium. The study findings indicated that role conflict, role ambiguity, and workload along with some personal factors such as age and gender have significant and positive influences on burnout of principals. These results are consistent with previous research (Crawford et al., 2010; Schwab & Iwanicki, 1982). In a study which examined 469 classroom teachers, it was found that role conflict and role ambiguity explained a statistically significant amount of burnout of teachers (Schwab & Iwanicki, 1982). Another study result indicated a strong relationship between workload and burnout and suggested that workload is a significant factor influencing employees’ burnout (Crawford et al., 2010). In contrast to expectation, a positive relationship between principals’ marital status, their leisure time with family and friends and sport activities, and burnout symptoms was not found.

In the Flanders region of Belgium, retention of school principals has been of concern at both primary and secondary schools. As the study findings demonstrate, role conflict, role ambiguity, and the workload of school principals were strongly related to burnout. However, some measures can be proposed to cope with the problem. Firstly, two methods to prevent and eliminate burnout can be suggested: some actions

Table 3. Factor loadings and coefficient alpha for symptoms of burnout.

Pattern Matrix ^a			
Symptoms for Burnout	Factor Loading		Cronbach's alpha
	1	2	
<i>1. Cognitive and affective symptoms</i>			
Indicate how often the listed symptoms occur to you? [Idealism]	0.730		0.916
Indicate how often the listed symptoms occur to you? [Motivation]	0.721		
Indicate how often the listed symptoms occur to you? [Competency feeling]	0.727		
Indicate how often the listed symptoms occur to you? [Self-esteem]	0.748		
Indicate how often the listed symptoms occur to you? [Depression]	0.693		
Indicate how often the listed symptoms occur to you? [Control feelings]	0.693		
Indicate how often the listed symptoms occur to you? [Frustration]	0.771		
Indicate how often the listed symptoms occur to you? [Duality]	0.741		
Indicate how often the listed symptoms occur to you? [Irritability]	0.744		
Indicate how often the listed symptoms occur to you? [Memory]	0.788		
Indicate how often the listed symptoms occur to you? [Concentration]	0.666		
Indicate how often the listed symptoms occur to you? [Fear]	0.653		
<i>2. Physical symptoms</i>			
Indicate how often the listed symptoms occur to you? [Sleep disorders]		0.710	0.834
Indicate how often the listed symptoms occur to you? [Severe fatigue]		0.881	
Indicate how often the listed symptoms occur to you? [Functional complaints]		0.826	
Indicate how often the listed symptoms occur to you? [Energy]		0.860	

Table 4. Factor loadings and coefficient alpha for role conflict and role ambiguity.

Pattern Matrix ^a			
Role conflict/ambiguity	Factor Loading		Cronbach's alpha
	1		
Is your job description realisable?	0.446		0.554
Are your job description tasks unclear?	0.684		
Do you often get a job that does not belong to your job responsibilities?	0.665		
Does ambiguity and lack of clarity in your range of duties create extra stress?	0.795		

Table 5. Factor loadings and coefficient alpha for workload.

Pattern Matrix ^a			
Workload	Factor Loading		Cronbach's alpha
	1		
On average how many hours per week do you work?	0.772		0.322
How many hours do you meet in total?	0.772		

which aim at the organisation of work and several actions which aim at the individual. The primary prevention method in the workplace should be 'collective' in nature and aimed at all teaching staff. According to the Job Demands-Resources Model (Bakker & Demerouti, 2007), work requirements can deplete teachers' reserves and increase the number of burnout cases, while the tools provided to the teaching staff reduced the feeling of exhaustion. Based on this model, the methods can be aimed at limiting work requirements, for example by reducing work pressure and making changes to working procedures, or increasing professional resources, such as autonomy, social support from superiors and colleagues and participation in decisions (Awa, Plaumann, & Walter, 2010). On the other hand, the secondary prevention method should be developed to help individuals manage and process the stress factors at work. This method can include many aspects, such as refresher courses or support groups of colleagues (Laugaa, Rasclea, & Bruchon-Schweitzer, 2008, Spickard, Gabbe,

Table 6. Path estimates for the proposed model and absolute fit measures.

Unstandardised relationship estimate			Direct	Indirect	Total	t-value	p-value
AMBI	<—	TALPA	0.006	0	0.006	1.419	0.156
AMBI	<—	LEAFA	-0.028	0	-0.028	-1.321	0.187
WORKL1	<—	LEASP	-0.412	0	-0.412	-1.881	0.06
WORKL1	<—	LEASO	0.127	0	0.127	0.405	0.686
WORKL1	<—	LEAFR	0.023	0	0.023	0.69	0.945
WORKL1	<—	LEAFA	-0.557	0	-0.557	-2.292	0.022
WORKL1	<—	PAGER	-0.536	0	-0.536	-3.342	***
COAF	<—	WORKL1	0.959	0.029	0.988	2.212	0.027
PHYS1	<—	WORKL1	0.759	0.03	0.789	2.594	0.009
PHYS1	<—	AMBI	0.452	0.498	0.95	4.278	***
COAF	<—	AMBI	0.626	0.48	1.106	5.438	***
PHYS1	<—	PGEND	0.237	0.189	0.426	3.892	***
PHYS1	<—	LEAFA	0.351	-0.086	0.265	1.511	0.131
PHYS1	<—	PAGER	0.375	-0.024	0.351	2.053	0.04
PHYS1	<—	WEXDT	0.05	0.062	0.112	1.486	0.137
PHYS1	<—	LEAFR	-0.165	-0.141	-0.306	-0.644	0.52
PHYS1	<—	LEASO	-0.11	-0.029	-0.139	-0.46	0.645
PHYS1	<—	LEASP	0.291	0.004	0.295	1.486	0.137
COAF	<—	PGEND	0.095	0.182	0.277	1.549	0.121
COAF	<—	LEASP	0.437	0.004	0.441	1.652	0.099
COAF	<—	TALPA	-0.002	0.009	0.007	-0.373	0.709
COAF	<—	LEAFA	0.477	-0.083	0.394	1.497	0.135
COAF	<—	PAGER	0.505	-0.024	0.481	1.938	0.053
COAF	<—	LEASO	-0.176	-0.028	-0.204	-0.581	0.561
COAF	<—	LEAFR	-0.158	-0.136	-0.294	-0.489	0.625
COAF	<—	WEXDT	0.052	0.06	0.112	1.505	0.132
COAF	<—	PSTAT	-0.104	-0.048	-0.152	-1.193	0.233
PHYS1	<—	TALPA	0.01	0.009	0.019	1.643	0.1
PHYS1	<—	PSTAT	-0.024	-0.5	-0.524	-0.284	0.776
Absolute fit measures							
Chi-square			1.989	12.514			
RMSEA			0.043	0.145			
Incremental fit measures							
Null Chi-square			733.810	6207.043			
NNFI (TLI)			0.914				
Parsimonious fit measures							
CFI			0.936				
IFI			0.938				
RFI			0.841				

Note: $N=545$; AMBI: Role conflict and ambiguity; TALPA: Talking with parents; LEAFA: Leisure activity (family); LEASP: Leisure activity (sport); LEASO: Leisure activity (social); LEAFR: Leisure activity (friends); WORKL1: Workload; PAGER: Age; COAF: Cognitive and affective symptoms; PHYS1: Physical symptoms; PGEND: Gender; WEXDT: Experience as a principal; PSTAT: Married or single.

& Christensen, 2002; Tabary, Callanquin, & Marinelli, 2007). These methods are situated at the level of the organisation because these help groups are formed within the companies, but also at the individual level, because they are more focused on the feelings of the individuals than on the organisation. Additionally, several attempts should be made to decrease role ambiguity, role conflict and workload by means of better organisational and job design, clear job descriptions and work guidelines. Providing training on stress management and time management for school principals will also be helpful in this regard. Furthermore, more support and intervention from the Flemish Ministry of Education such as employee assistance programmes and counselling can also be provided to alleviate the problem of workload.

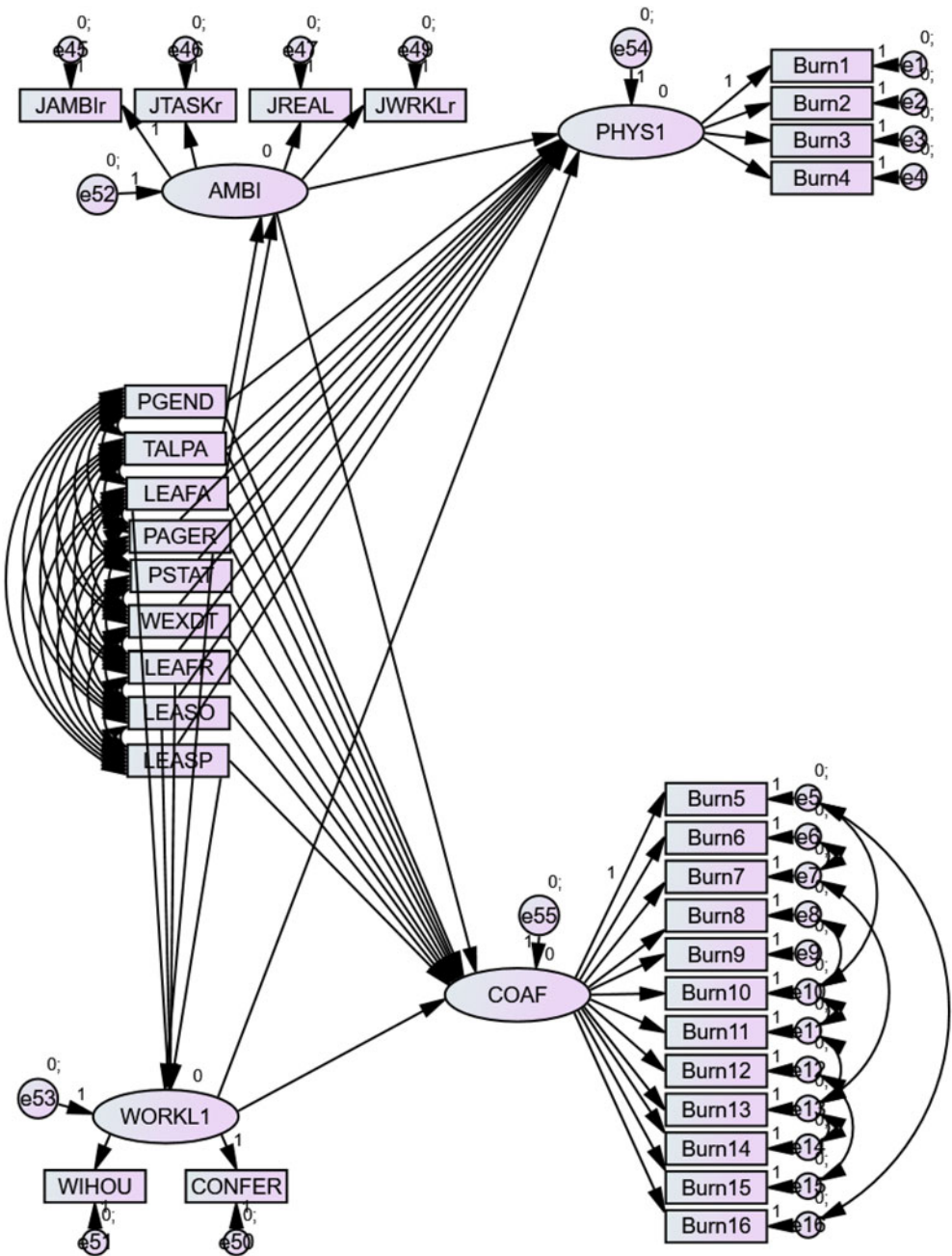


Figure 2. Structural model.

In contrast to the suggestion in the literature (Maslach, 1995), the research findings showed no support for a positive relationship between demographic characteristics such as principals' marital status and their leisure time with family and friends, and their sport activities and physical and cognitive and affective burnout symptoms. On the other hand, the study found a positive relationship between age and gender and physical burnout symptoms. The study findings demonstrated that 51% of

participants have psychosocial conditions. Sixty-two per cent of those affected by psychosocial disorders are women and 38% are men. Most of the symptoms of burnout also occur mainly between the ages of 40 and 60 for primary education principals. These findings are consistent with the literature which showed that females working in a job have other responsibilities after their work and this is a factor that triggers their exhaustion (Schaufeli & Enzmann, 1998).

7. Conclusion, limitations and future studies

The impacts of personal factors, role conflict and ambiguity, and workload on burnout of school principals at Flemish primary and secondary schools were examined. The study results reveal that school principals with a higher workload, a more ambiguous role, and higher role conflict have more tendency to show burnout symptoms. The study recommended several measures for school principals and the relevant ministry to overcome this problem.

This study has some limitations. First, the relationships among the role stressors and burnout included common method variance because the research data was obtained from a self-administered questionnaire. Secondly, the possible impact of some organisation-level variables such as climate, organisational commitment and work arrangements that may affect an individual's perception of burnout and its consequences have not been considered.

Future studies should explore the relationship between role stressors, burnout, and turnover intention of school principals. Future research should examine not only their direct effects on burnout, but also moderating effects of burnout on the relationship between role stressors and turnover intention (Cooper et al., 2001).

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