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Article

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Rajagiri Management Journal (RAMJ)

Provided in Cooperation with:

Rajagiri Business School and Rajagiri College of Social Sciences, Kochi

Suggested Citation: Dhaneesh, R.; Iswarya, V. S. (2023) : Stress management intervention program for teaching staff at private engineering colleges in Tamil Nadu to improve their job performance and well-being, Rajagiri Management Journal (RAMJ), ISSN 2633-0091, Emerald, Leeds, Vol. 17, Iss. 3, pp. 278-297,
<https://doi.org/10.1108/RAMJ-02-2023-0051>

This Version is available at:

<https://hdl.handle.net/10419/337029>

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Stress management intervention program for teaching staff at private engineering colleges in Tamil Nadu to improve their job performance and well-being

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Abstract

Purpose – Stress at workplace is quite common in all sorts of environment. It can be occurring when the demand in the job does not match with the requirements; thereby, it affects their performance. The study was conducted with the aim to identify the major factors that induce stress for teaching professionals in private engineering colleges and its impact towards job performance. From the observation and discussion, it was found that Workload, Working Hour, Salary, Role Ambiguity and Lack of Social Support are the major factors for stress.

Design/methodology/approach – A structured questionnaire was framed with the help of stress-causing factors and their effect on job performance. In addition to this, a few questions were asked related to stress management intervention program. The survey was conducted with 370 respondents, while further analysis was carried out with the filled 260 respondent's data using descriptive statistics, correlation, regression, ANOVA and SEM.

Findings – The study reveals that workload plays a significant role in stress whereas other factors are consequently lower than that. Also, the primary-level intervention programs are more effective than secondary-level intervention programs to reduce the stress level of stressors.

Originality/value – The paper was originally done by collecting data from the staff.

Keywords Workload, Role ambiguity, Salary, Social support, Intervention programs

Paper type Research paper

1. Introduction

Stress at workplace is unavoidable, but it may differ from one profession to another as well as the situation based on how individual/person tackles it. In general, teaching profession is considered as stress free profession. Due to rapid changes occurred in modern teaching pedagogy, technological advancement, expectation of management, career growth and survival, the teaching professionals are facing challenges in their profession (Olivier and Venter, 2003). The most common factors which create stress in workplace are workload, overtime, lack of recognition, misbehaviour of students, inadequate resource, role ambiguity and low salary (Borg *et al.*, 1991). These factors affect teaching staff performance and productivity which leads to physical, psychological and behavioural effects. The physical symptoms include weakness, muscular tightness, headaches, heart tremors, sleeping disorder and constipation (Hakanen *et al.*, 2011). Psychological symptoms



include sadness, nervousness, dissuasion, petulance, glumness, being dazed and unable to manage, intellectual difficulties, such as abridged ability to make decisions (Hobfoll, 2011). Depression's behavioural symptoms include absenteeism, hostility, diminished creativity and inventiveness, poor job performance, marital problems, irritability, mood swings, an inability to tolerate hurdles, increased impatience and a sense of isolation (Mroczek *et al.*, 2015). Even though many research studies has suggested and proven various stress management techniques, the present study focuses on to identify major stress-causing factor, symptoms, impact and remedial measures to overcome stress through primary, secondary and tertiary stress management intervention (SMI) techniques for the well-being of teaching staff.

2. Workplace stress and intervention techniques

Workplace stress can occur from the factors of work environment which affects an individual's psychological, physiological and behavioural conditions so that he/she cannot able to do normal activities (Newman and Beehr, 1979). The resulting negative outcome may impact their job performance. Ivancevich *et al.*' approach is enough to mitigate their unintended consequences (1990). There are three stages that make up the stress model: It is important to consider (a) the severity of stresses in the workplace, (b) the employee's assessment of stressful conditions and (c) the employee's resiliency while dealing with the outcomes. In an effort to reduce stress in the workplace, the authors of a study from 2003 (Murphy and Sauter) used three tiers of SMI: preventive, remedial and instructive. The objective of primary intervention technique is used to identify the sources which create stress and help to avoid it thereby providing well-being of an individual. A few examples of primary intervention programs are redesigning of job, authority for decision-making and co-workers' support (Kolbell, 1995). This strategy by Ivancevich *et al.* is sufficient to reduce the negative effects they may have (1990). The stress model consists of these three phases: It's crucial to take into account (a) the intensity of workplace pressures, (b) the employee's evaluation of those stresses and (c) the resilience of the person in coping with the results. The authors of a 2003 research (Murphy and Sauter) employed preventative, corrective and instructional SMI strategies to lower workplace stress.

3. Literature survey

Keković *et al.* (2022) conducted a study with health workers in hospitals and identifies that 27 variables create stress for them. The study pointed out that inadequate personal income, work overload and misinformation of patients are considered as the major stress-causing factors. The study concludes as stress can be overcome through yoga, meditation and regular exercise practiced by the workers.

Greif and Palmer's (2022) study was conducted to ascertain stress and stress management coaching. They come to the conclusion that changes in structural stress situations and resources like freedom of action and social support are the primary causes of stress. The studies all came to the same conclusion: time management, relaxation and mindfulness exercises are the best ways to reduce stress.

Eddy *et al.*'s (2022) study used bibliotherapy-based stress management training program for teachers using a control group size ($N = 52$). The study identifies that the intervention program supports the teachers to reduce stress and mental health symptoms. The study also finds that the program did not help the teachers to improve job satisfaction. However, it is recommended to provide a few feasible programs to improve satisfaction and well-being.

Dodanwala *et al.* conducted a study on workplace stress and work-life conflict (2022). Three hundred and eight members of the project personnel in Sri Lanka were surveyed using a predesigned questionnaire. The findings indicate that role and time demands contribute most to mental and physical exhaustion on the job. Both introducing a primary intervention

program and providing employees with extra time to cope with stress were shown to be beneficial in the study.

Meng and Wang (2018) conducted a study on occupational stress of teaching staff in a university with a sample size of 240 respondents in China. The study identifies work overload, working hours and lack of support from co-workers as stress-causing factors in the university. The study suggested providing primary- and secondary-level intervention programs to the staff for their well-being.

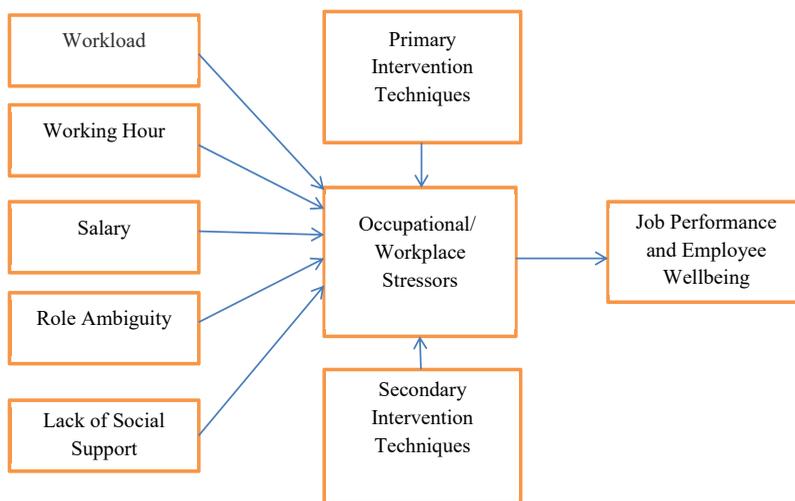
4. Objectives of study

- (1) To study the factors causing workplace stress
- (2) To identify the level of workplace stress with respect to demographic variables
- (3) To analyze the relationship between stress-causing factors and job performance
- (4) To implement the SMI techniques which helps to overcome stress and provide well-being

5. Research hypothesis

- H1.* Workload, working hour, salary, role ambiguity and lack of social support have impact on occupational stress.
- H2.* Occupational stress leads to negative impact on job performance.
- H3.* Primary and secondary stress management techniques help reduce stress and provide well-being.

6. Research framework findings



7. Research design

The study aimed to investigate the factors which induce stress in workplace among teaching staff in private engineering colleges in Tamil Nadu. The study is quantitative in nature. A structured questionnaire was created with the help of the literature review, and respondents were asked to rate their level of agreement with statements regarding the factors that cause stress and the SMI programs (primary and secondary levels) that will lead to improved job performance on a five-point Likert scale, where a score of 5 would indicate strong agreement, a score of 4 would indicate agreement and a score of 3 would indicate neutrality. We mailed out and collected surveys from 370 instructors at various engineering colleges and universities in Tamil Nadu using a convenience sampling strategy. After sifting through and eliminating the unfinished survey pool, we were left with 260 fully completed questions to examine. The data was analyzed using a variety of methods available in SPSS 26, including descriptive statistics, correlation, regression, analysis of variance and a structural equation model.

8. Analysis and discussion

8.1 Descriptive statistics

Descriptive statistics may be put to good use by labelling the most basic features of data. [Table 1](#) displays descriptive data on the demographics of the respondents. Based on the provided information, we can conclude that the average values of gender, age, job title, years of experience and annual income are, respectively, 1.558, 2.6269, 2.63, 2.62692 and 2.63. Statistics such as the standard error, median, mode, standard deviation, sample variance, kurtosis, skewness, range, minimum value, maximum value, sum and count are also included in the table to offer a more complete picture of each demographic data. The study findings shown in the following table provide an adequate evaluation of the occupational stress experienced by faculty members at private engineering schools.

8.2 Correlation analysis

The coefficient of correlation between workload, working hours, salary, social support and role ambiguity with occupational stress is well explained in [Table 2](#). It describes workload, working hours and role ambiguity as being positively correlated with occupational stress, and the values obtained through the analysis are 0.950, 0.662 and 0.684. Occupational stress is caused first by workload, next by job uncertainty and last by the number of hours worked. When compared to occupational stress, however, both salary and social support were shown to have negative correlations (-0.885 and -0.906 , respectively). Our research shows that teachers of engineering at private universities are more likely to experience occupational stress if they meet these five characteristics.

[Tables 3–5](#) provide summaries of the primary intervention program and the secondary intervention program, respectively, in the context of occupational stress. Inferred from the aforementioned data are the correlation coefficients of -0.85 , -0.87 and -0.835 between occupational stress and the effectiveness of the faculty, the primary intervention program, and the secondary intervention program, respectively. It denotes that the teaching staff cannot perform well on the job due to occupational stress, whereas the intervention program supports them to reduce the stress.

9. Regression analysis

9.1 Factors causing occupational stress

Regression is a statistical tool used to build a model and examine the relationship between dependent and independent variables. This analysis is used to determine the degree of

Table 1.
Descriptive statistics of
demographic variables
of the respondents

	Gender			Age			Designation			Experience			Annual income		
Mean	1.558	Mean	2.6269	2.63	Mean	2.62692	2.63	Mean	2.62692	2.63	Mean	2.63			
Standard error	0.031	Standard error	0.0662	0.07	Standard error	0.06617	0.07	Standard error	0.06617	0.07	Standard error	0.07			
Median	1.5	Median	3	3	Median	3	3	Median	3	3	Median	3			
Mode	1.5	Mode	3	3	Mode	3	3	Mode	3	3	Mode	3			
Standard deviation	0.498	Standard deviation	1.0669	1.07	Standard deviation	1.0669	1.07	Standard deviation	1.0669	1.07	Standard deviation	1.07			
Sample variance	0.248	Sample variance	1.1383	1.14	Sample variance	1.13827	1.14	Sample variance	1.13827	1.14	Sample variance	1.14			
Kurtosis	-1.96	Kurtosis	-1.2149	-1.21	Kurtosis	-1.2149	-1.21	Kurtosis	-1.2149	-1.2	Kurtosis	-1.2			
Skewness	-0.23	Skewness	-0.1523	-0.15	Skewness	-0.1523	-0.15	Skewness	-0.1523	-0.2	Skewness	-0.2			
Range	1	Range	3	3	Range	3	3	Range	3	3	Range	3			
Minimum	1	Minimum	1	1	Minimum	1	1	Minimum	1	1	Minimum	1			
Maximum	2	Maximum	4	4	Maximum	4	4	Maximum	4	4	Maximum	4			
Sum	145	Sum	683	683	Sum	683	683	Sum	683	683	Sum	683			
Count	260	Count	260	260	Count	260	260	Count	260	260	Count	260			

Source(s): Table by authors

Correlations	Workload	Working hour	Salary	Social support	Role ambiguity	Occupational stress
Workload	Pearson Correlation Sig.(2-tailed) N	1 0.678** <0.001 260	-0.892** <0.001 260	-0.906** <0.001 260	0.729** <0.001 260	0.950** <0.001 260
Working hour	Pearson Correlation Sig.(2-tailed) N	0.678** <0.001 260	-0.696** <0.001 260	-0.726** <0.001 260	0.597** <0.001 260	0.662** <0.001 260
Salary	Pearson Correlation Sig.(2-tailed) N	-0.892** <0.001 260	1 0.972** <0.001 260	0.972** <0.001 260	-0.685** <0.001 260	-0.885** <0.001 260
Social support	Pearson Correlation Sig.(2-tailed) N	-0.906** <0.001 260	0.972** <0.001 260	1 0.972** <0.001 260	-0.707** <0.001 260	-0.906** <0.001 260
Role ambiguity	Pearson Correlation Sig.(2-tailed) N	0.729** <0.001 260	-0.685** <0.001 260	-0.707** <0.001 260	1 0.684** <0.001 260	0.684** <0.001 260
Occupational stress	Pearson Correlation Sig.(2-tailed) N	0.950** <0.001 260	-0.885** <0.001 260	-0.906** <0.001 260	0.684** <0.001 260	1 0.684** <0.001 260

Note(s): **Correlation is significant at the 0.01 level (2-tailed)
Source(s): Table by authors

Table 2.
Correlation between
workload, working
hours, salary, social
support and role
ambiguity with
occupational stress

similarity between two sets of data. Methods of hypothesis testing are used for this purpose. The hours worked, salary, social support and job uncertainty are all independent variables that contribute to the dependent variable of occupational stress. After that, we may propose the following research hypothesis:

H01. Factors such as workload, working hours, salary, social support and role ambiguity do not impact occupational stress.

Table 3.
Correlation between occupational stress and job performance

Correlations		Occupational stress	Job performance
Occupational stress	Pearson Correlation	1	-0.850**
	Sig. (2-tailed)		<0.001
Job performance	Pearson Correlation	-0.850**	1
	Sig. (2-tailed)	<0.001	
	N	260	260

Note(s): **Correlation is significant at the 0.01 level (2-tailed)
Source(s): Table by authors

Table 4.
Correlation between primary intervention program and occupational stress

Correlations		Primary intervention program	Occupational stress
Primary intervention program	Pearson Correlation	1	-0.870**
	Sig. (2-tailed)		<0.001
Occupational stress	Pearson Correlation	-0.870**	1
	Sig. (2-tailed)	<0.001	
	N	260	260

Note(s): **Correlation is significant at the 0.01 level (2-tailed)
Source(s): Table by authors

Table 5.
Correlation between secondary intervention program and occupational stress

Correlations		Secondary intervention program	Occupational stress
Secondary intervention program	Pearson Correlation	1	-0.835**
	Sig. (2-tailed)		<0.001
Occupational stress	Pearson Correlation	-0.835**	1
	Sig. (2-tailed)	<0.001	
	N	260	260

Note(s): **Correlation is significant at the 0.01 level (2-tailed)
Source(s): Table by authors

HAI. Factors such as workload, working hours, salary, social support and role ambiguity impact occupational stress.

SPSS's Model Summary [Table 6](#), which is generated before any other table during a linear regression analysis, provides a thorough description of the model's characteristics. We paid special attention to issues of position ambiguity, long hours, low income, high stress and a lack of social support. When comparing two variables, the *R*-value shows how strong that link is. In this case, we will continue our inquiry only if *R* is less than or equal to 0.4. The quality of this order is represented by a value of 0.957. The coefficient of determination, or *R*², reveals what fraction of total variation in the dependent variable can be pinned on the independent factors. With an *R*-squared value greater than 0.5, we may infer that the model is sufficient for discovering the association. Also of very good quality is the situation's *R*-squared score of 0.916. Adjusted *R*-square in multiple regressions shows how representative the sample data is of the whole population, or how much variation there is between the sample and the overall results. Adjusted *R*-squared values must be higher than *R*-squared at a bare minimum. Given how close it is to the ideal of 0.916, the price of 0.915 is a steal. SPSS's second table of a regression analysis is where model significance testing takes place.

***p*-value/sig value:** Researchers often use either a 95% confidence interval or a 5% criterion of significance in their studies. This means that we may safely assume that the *p*-value is rather small (0.05). The first entry in the table at the top of this page is numbered 001. This accounts for the significance of the result.

***F*-ratio:** The accuracy with which a model makes predictions about a given variable is evaluated. A number greater than one indicates that the model is effective and has a high *F*-ratio yield. The total of 556.15 in the table meets expectations. A person's level of

Model summary				
Model	<i>R</i>	<i>R</i> -square	Adjusted <i>R</i> -square	Std. error of the estimate
1	0.957 ^a	0.916	0.915	0.417

a. Predictors: (Constant), role ambiguity, working hour, salary, workload, social support

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	482.437	5	96.487	556.15	<0.001 ^b
	Residual	44.067	254	0.173		
	Total	526.504	259			

a. Dependent variable: Occupational stress

b. Predictors: (Constant), role ambiguity, working hour, salary, workload, social support

Coefficients ^a						
Model		Unstandardized coefficients		Standardized coefficients		Sig.
		B	Std. error	Beta	t	
1	(Constant)	2.17	0.399		5.433	<0.001
	Workload	0.729	0.044	0.751	16.615	<0.001
	Working hour	-0.02	0.031	-0.017	-0.642	<0.001
	Salary	0.118	0.109	0.084	1.079	<0.001
	Social support	-0.479	0.117	-0.351	-4.102	<0.001
	Role ambiguity	-0.046	0.029	-0.044	-1.612	<0.001

a. Dependent variable: Occupational stress

Source(s): Table by authors

Table 6. Regression analysis of role ambiguity, working hour, salary, workload and social support with occupational stress

occupational stress is influenced by several factors, including the nature of the work, the number of hours put in, the salary, the availability of social support and the degree of clarity around the individual's role in the organization.

9.2 Occupational stress vs. job performance

H02. Occupational stresses impact job performance of staff.

HA2. Occupational stresses do not impact job performance of staff.

SPSS's Model Summary Table 7, which is generated before any other table during a linear regression analysis, provides a thorough description of the model's characteristics. Here, job performance is the fundamental criterion for assessment. When comparing two variables, the *R*-value shows how strong that link is. Having an *R* rating of 0.850 is really high. The coefficient of determination, or *R*², reveals what fraction of total variation in the dependent variable can be pinned on the independent factors. If the coefficient of determination (*R*) is more than 0.5, then the model is sufficiently fit to detect the association. Also respectable is the *R*-squared value of 0.722 found here. Adjusted *R*-square in multiple regressions shows how representative the sample data is of the whole population, or how much variation there is between the sample and the overall results. Adjusted *R*-squared values must be higher than *R*-squared at a bare minimum. To be honest, 0.721 is not perfect, but it's not far off from the optimum number of 0.916, either. The second table of a regression analysis in SPSS is used to assess the significance of a model.

***p*-value/sig value:** Researchers often use either a 95% confidence interval or a 5% criterion of significance in their studies. This means that we may safely assume that the *p*-value is rather small (0.05). The first entry in the table at the top of this page is numbered 001. This accounts for the significance of the result.

Model summary				
Model	<i>R</i>	<i>R</i> -square	Adjusted <i>R</i> -square	Std. error of the estimate
1	0.850 ^a	0.722	0.721	0.753

a. Predictors: (Constant), job performance

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	380.3	1	380.3	671.102	<0.001 ^b
	Residual	146.2	258	0.567		
	Total	526.5	259			

a. Dependent variable: Occupational stress
b. Predictors: (Constant), job performance

Coefficients ^a						
Model		Unstandardized coefficients		Standardized coefficients		Sig.
		B	Std. error	Beta	t	
1	(Constant)	7.904	0.203		38.898	<0.001
	Job performance	-1.261	0.049	-0.85	-25.906	<0.001

a. Dependent variable: Occupational stress

Table 7. Regression analysis of occupational stress vs. job performance

Source(s): Table by authors

F-ratio: It is a quantitative evaluation of a model's ability to accurately forecast the target variable. An F-ratio greater than one indicates a successful model with a high predictive yield 671.102 seems to be a good estimate based on the information provided. Reduced output is a well-known consequence of stress in the workplace.

9.3 Primary intervention program vs. occupational stress

H03. Primary intervention program has positive impact on occupational stress.

HA3. Primary intervention program has negative impact on occupational stress.

SPSS's Model Summary Table 8, which is generated before any other table during a linear regression analysis, provides a thorough description of the model's characteristics. Currently, only factors related to the primary intervention program are considered. When comparing two variables, the *R*-value shows how strong that link is. The *R*-value here, at 0.870, is acceptable. The coefficient of determination, or R2, reveals what fraction of total variation in the dependent variable can be pinned on the independent factors. If the coefficient of determination (*R*) is more than 0.5, then the model is sufficiently fit to detect the association. As an extra measure of quality, the 0.757 *R*-squared value in this case is fine as well. Adjusted *R*-square in multiple regressions shows how representative the sample data is of the whole population, or how much variation there is between the sample and the overall results. Adjusted *R*-squared values must be higher than *R*-squared at a bare minimum. Our result of 0.756 is rather good, and it's not far from the perfect value of 0.916. SPSS has a second table for a regression test, which is used to examine the predictive power of a model.

p-value/sig value: Researchers often choose a 95% CI or a 5% *p*-value criterion. That means the *p*-value cannot be higher than 0.05. The value 0.001 represents this in the aforementioned table. The discovery is significant.

Model summary				
Model	<i>R</i>	<i>R</i> -square	Adjusted <i>R</i> -square	Std. error of the estimate
1	0.870 ^a	0.757	0.756	0.704
a. Predictors: (Constant), primary intervention program				

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	398.5	1	398.5	803.21	<0.001 ^b
	Residual	128	258	0.496		
	Total	526.5	259			
a. Dependent variable: Occupational stress						
b. Predictors: (Constant), primary intervention program						

Coefficients ^a						
Model		Unstandardized coefficients		Standardized coefficients		Sig.
		B	Std. error	Beta	t	
1	(Constant)	7.812	0.183		42.73	<0.001
	Primary intervention program	-1.248	0.044	-0.87	-28.34	<0.001

Source(s): Table by authors

Table 8. Regression analysis of primary intervention program and occupational stress

F-ratio: The accuracy with which a model makes predictions about a given variable is evaluated. A number greater than one indicates that the model is effective and has a high F-ratio yield. Towards the top of the chart, you'll find a rock-solid sum: 803.21. Evidence like this suggests the primary intervention strategy was effective in reducing stress in the workplace.

9.4 Secondary intervention program vs. occupational stress

H04. Secondary intervention program has positive impact on occupational stress.

HA4. Secondary intervention program has negative impact on occupational stress.

Table 9 indicates the regression analysis in SPSS, the first step is to generate a detailed description of the model in a table called the Model Summary. Considerations unique to the secondary intervention strategy are now under scrutiny. *R*-value represents the strength of the relationship between the two variables. We have a respectable *R*-value of 0.835. The amount of variation in the dependent variable that can be ascribed to the independent variables is represented by the *R*-squared statistic. For a model to be able to make the association, the coefficient of determination (*R*) must be greater than 0.5. Similarly, the 0.697 *R*-squared value is acceptable here. The Adjusted *R*-square in multiple regressions shows how close the results are to those obtained using a single regression, or how much variation there is between the sample and the population. Adequately adjusting for *R*-squared is required. This situation is good enough with a 0.696 value. SPSS's second table in a regression test one examines whether the model is statistically significant enough to predict the result.

p-value/sig value: Research often uses a 95% confidence interval or a 5% criterion of significance. Therefore, the *p*-value has to be much below than 0.05. A value of 0.001 represents this in the aforementioned table. This is a really significant result.

F-ratio: This measure of the model's performance improves the predictability of the variable in question. An efficient model with a positive F-ratio yield has value larger than one.

Model summary				
Model	<i>R</i>	<i>R</i> -square	Adjusted <i>R</i> -square	Std. error of the estimate
1	0.835 ^a	0.697	0.696	0.786

a. Predictors: (Constant), secondary intervention Program

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	367.235	1	367.24	594.884	<0.001 ^b
	Residual	159.269	258	0.617		
	Total	526.504	259			

a. Dependent variable: Occupational stress
b. Predictors: (Constant), secondary intervention program

Coefficients ^a						
Model		Unstandardized coefficients		Standardized coefficients		
		B	Std. error	Beta	t	Sig.

1	(Constant)	7.986	0.219		36.481	<0.001
	Secondary intervention program	-1.274	0.052	-0.835	-24.39	<0.001

a. Dependent variable: Occupational stress

Source(s): Table by authors

Table 9. Regression analysis of secondary intervention program and occupational stress

There's good news: the figure in the table above is 594.884. That's why it's important to have secondary intervention programs that work to lessen stress in the workplace.

10. Structural equation model for job performance and well-being

Variable summary

Observed, endogenous variables

Occupational/Workplace Stressors
Primary Intervention Techniques
Job Performance and Employee Well-being
Secondary Intervention Techniques

Observed, exogenous variables

Workload
Working Hour
Salary
Role Ambiguity
Lack of Social Support

Unobserved, exogenous variables

e1
e4
e2
e3

Variable counts

Number of variables in your model: 13
Number of observed variables: 9
Number of unobserved variables: 4
Number of exogenous variables: 9
Number of endogenous variables: 4

The coefficient for Workload in this situation is 0.466, showing Workload's partial contribution assuming no change in other Occupational or Workplace Stressors. Both the expected positive sign and the coefficient value are significant at the 1% level, indicating that increased workload does indeed lead to increased occupational/workplace stresses. When controlling for other stressors in the workplace, the coefficient for Lack of Social Support is 0.201, indicating a moderate level of effect. For example, the predicted positive sign suggests a positive influence, and the coefficient value is significant at the 1% level, suggesting that stress in the workplace increases by one unit for every one point increase in Lack of Social Support. The coefficient of Working Hour is 0.004, indicating that Working Hour has only a little impact when all other occupational and workplace stressors are controlled for. This coefficient value is statistically significant at the 1% level, and its negative sign suggests a negative effect, implying that occupational/workplace stresses will decrease with each unit decline in Working Hour. If all

other factors in a job or workplace remain the same, income may be a significant motivating factor (coefficient of 0.320) shown in Table 10 and Figure 1.

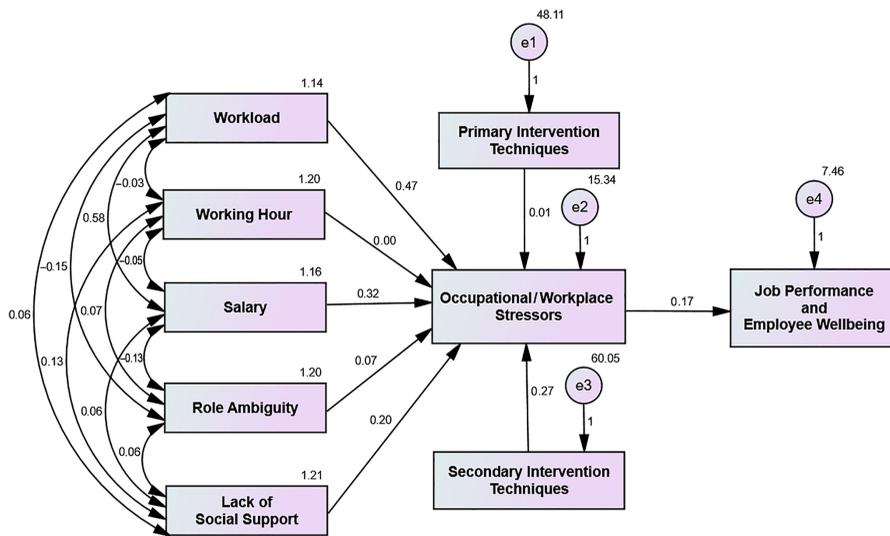
According to the predicted significance level of 1%, the positive sign of the coefficient value indicates that occupational/workplace stressors will grow with each unit increase in salary. Assuming that Occupational and Workplace Stressors remain unchanged, the coefficient for Role Ambiguity is 0.069 and shows the moderate impact of Role Ambiguity. Since the calculated coefficient value is positive and significant at the 1% level, this suggests that a rise in Role Ambiguity has a favourable influence on occupational and workplace stressors. When Occupational/Workplace Stressors are held constant, the coefficient for Primary Intervention Techniques is 0.014, indicating the technique’s partial impact. Indicating a positive impact, the calculated coefficient value of 1.01 suggests that occupational/workplace stressors would rise with each unit increase in primary intervention techniques. With occupational and workplace stressors held constant, the coefficient for secondary intervention techniques is 0.273, showing a partial influence of these techniques. Since the calculated coefficient value is positive and significant at the 1% level, it follows that the addition of secondary intervention techniques has a favourable influence on occupational and workplace stressors. When Job Performance and Employee Well-Being are held constant, the coefficient for Occupational/Workplace Stressors is 0.168, representing the partial influence of Occupational/Workplace Stressors. If the calculated coefficient value is positive, then the relationship between occupational/workplace stressors and job performance and employee well-being is positive and statistically significant at the 1% level.

As can be seen in Table 11, the estimated *p*-value of 0.000 is lower than the significance level of 0.05, suggesting a perfect match. It is clear that there is a good match between these two variables since both the GFI and the AGFI are more than 0.8. Root Mean Square Residual = 0.071 and Root Mean Score Error of Approximation = 0.059, both less than 0.10,

Sl. no.	Variables			Unstandardized coefficient	S.E.	t value	<i>p</i> -value
1	Occupational/ Workplace Stressors	←	Workload	0.466	0.273	1.706	<0.001**
2	Occupational/ Workplace Stressors	←	Lack of Social Support	0.201	0.230	0.874	<0.001**
3	Occupational/ Workplace Stressors	←	Working Hour	-0.004	0.231	-0.019	<0.001**
4	Occupational/ Workplace Stressors	←	Salary	0.320	0.270	1.185	<0.001**
5	Occupational/ Workplace Stressors	←	Role Ambiguity	0.069	0.232	0.296	<0.001**
6	Occupational/ Workplace Stressors	←	Primary Intervention Techniques	0.014	0.036	0.392	<0.001**
7	Occupational/ Workplace Stressors	←	Secondary Intervention Techniques	0.273	0.032	8.444	<0.001**
8	Job Performance and Employee Well-being	←	Occupational/ Workplace Stressors	0.168	0.039	4.344	<0.001**

Source(s): Table by authors; Statistically analyzed data

Table 10. Variables in the structural equation model analysis



Source(s): Figure by authors

Figure 1.
SEM for job
performance and
well-being

Sl. no.	Variable	Value
1	Chi-square value	129.593
2	<i>p</i> -value	0.000**
3	GFI	0.897
4	AGFI	0.941
5	CFI	0.592
6	RMR	0.071
7	RMSEA	0.059

Source(s): Table by authors; Statistically analyzed data

Table 11.
Model fit summary

indicate that the model fits the data rather well. This data supports the null hypothesis with a Comparative Fit Index (CFI) of 0.592.

10.1 Confirmatory factor analysis for Primary-Level Stress Management Program (PLSMP)

Table 12 enumerates the values of validity assessment of the PLSMP Instrument questionnaire item-wise. Meanwhile, the CFA value of “Primary-Level Stress Management Program” falls between 0.720 and 0.990, there are no items deleted as the values have fulfilled the requirement of over 0.40. The internal consistency of all variables indicated that all items endured well with the internal consistency of 0.720 while the variable with the topmost validity is “Greater job satisfaction” as shown in Figure 2.

10.2 Confirmatory factor analysis for Secondary-Level Stress Management Program

Table 13 enumerates the values of validity assessment of the SLSMP Instrument questionnaire item-wise. Meanwhile, the CFA value of “Secondary-Level Stress Management Program” falls between 0.720 and 0.990, there are no items deleted as the values have fulfilled the requirement of

Sl. no.	Item(s) of PLSMP instrument	Factor item	CFA loading
<i>Mindfulness training program</i>			
1	Greater job satisfaction	PMTP1	0.990
2	Greater ability to focus	PMTP2	0.910
3	Enhance the level of clarity and creativity	PMTP3	0.780
4	Improves social relationship	PMTP4	0.830
5	Enhance task performance	PMTP5	0.800
<i>Resilience training program</i>			
6	Increased self-awareness	P RTP1	0.970
7	Enhance personal empowerment	P RTP2	0.740
8	Helps to manage the physical, psychological and emotional health	P RTP3	0.880
9	Reduce absenteeism	P RTP4	0.910
10	Increased workplace engagement	P RTP5	0.890
<i>Psychological intervention</i>			
11	Protect against negative outcomes	PPI1	0.860
12	Positive work reflection	PPI2	0.870
13	Reduce mental disengagement from work	PPI3	0.990
14	Improve work capacity	PPI4	0.720
15	Helps to sustain in difficult situation	PPI5	0.830
<i>Behavioural intervention</i>			
16	Improve the morale	PBI1	0.980
17	Effectively minimize negative behaviours	PBI2	0.910
18	Ensure a healthy work environment	PBI3	0.800
19	Enhance the management skills	PBI4	0.840
20	Helps to stop risky behaviour	PBI5	0.770

Table 12.
Summary table of validity results of PLSMP instrument

Source(s): Table by authors; Statistically analyzed data

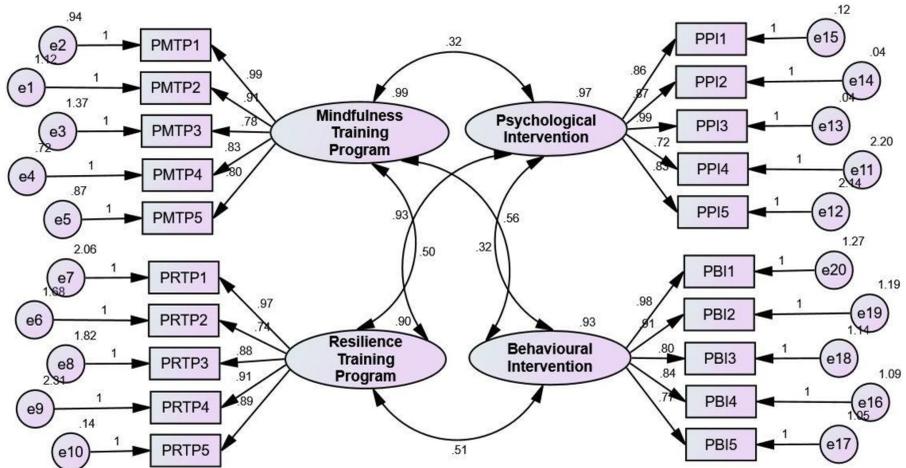


Figure 2.
Measurement model of PLSMP instrument

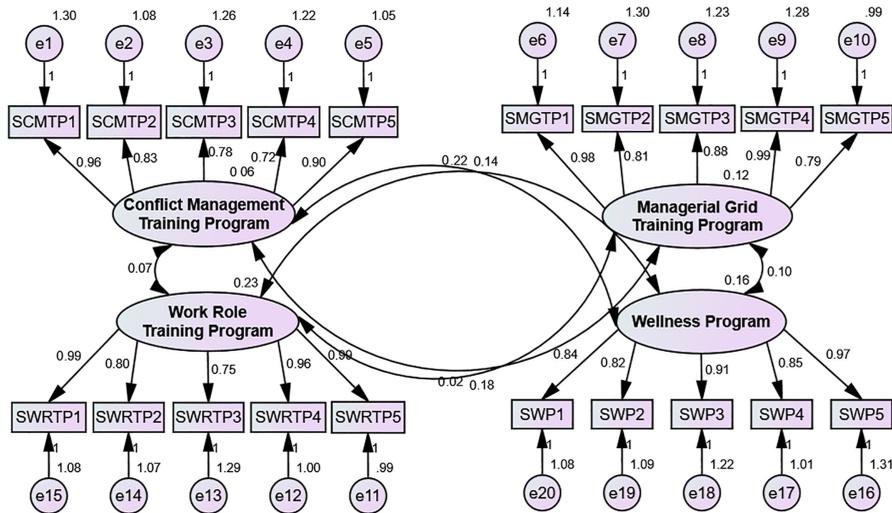
Source(s): Figure by authors

over 0.40. The internal consistency of all variables indicated that all items endured well with the internal consistency of 0.720 while the variables with the topmost validity are “Enhance the teamwork”, “Highly effective tasks” and “Increase efficiency in process” which were represented in Figure 3.

Sl. no.	Item(s) of SLSMP instrument	Factor item	CFA loading
<i>Conflict management training program</i>			
1	Build strong relationship with other employees	SCMTP1	0.960
2	Help to demonstrate the competency	SCMTP2	0.830
3	Reduce the workplace conflict	SCMTP3	0.780
4	Helps to identify the unresolved conflict	SCMTP4	0.720
5	Create smoother working relationship	SCMTP5	0.900
<i>Managerial grid training program</i>			
6	Helps to analyze the leadership styles	SMGTP1	0.980
7	Motivate to involve in decision-making process	SMGTP2	0.810
8	Helps to create personal development plan	SMGTP3	0.880
9	Enhance the teamwork	SMGTP4	0.990
10	Improve their work concern	SMGTP5	0.790
<i>Work role training program</i>			
11	Highly effective tasks	SWRTP1	0.990
12	Motive to complete the work before the deadline	SWRTP2	0.800
13	Achieve the target object	SWRTP3	0.750
14	Improved retention rates	SWRTP4	0.960
15	Increase efficiency in process	SWRTP5	0.990
<i>Wellness program</i>			
16	Lowers the risk of illness	SWP1	0.840
17	Improves the teamwork	SWP2	0.820
18	Reduce the cost for healthcare	SWP3	0.910
19	Reduce the stress	SWP4	0.850
20	Reduce the risk of diseases	SWP5	0.970

Table 13.
Summary table of
validity results of
SLSMP instrument

Source(s): Table by authors; Statistically analyzed data



Source(s): Figure by authors

Figure 3.
Measurement model of
SLSMP instrument

10.3 Confirmatory factor analysis for occupational stress

The item-by-item Figure 4 OS Instrument validity evaluation values are shown in Table 14. Meanwhile, the CFA value of “Occupational Stress” falls between 0.720 and 0.980, there are no items deleted as the values have fulfilled the requirement of over 0.40. With an internal

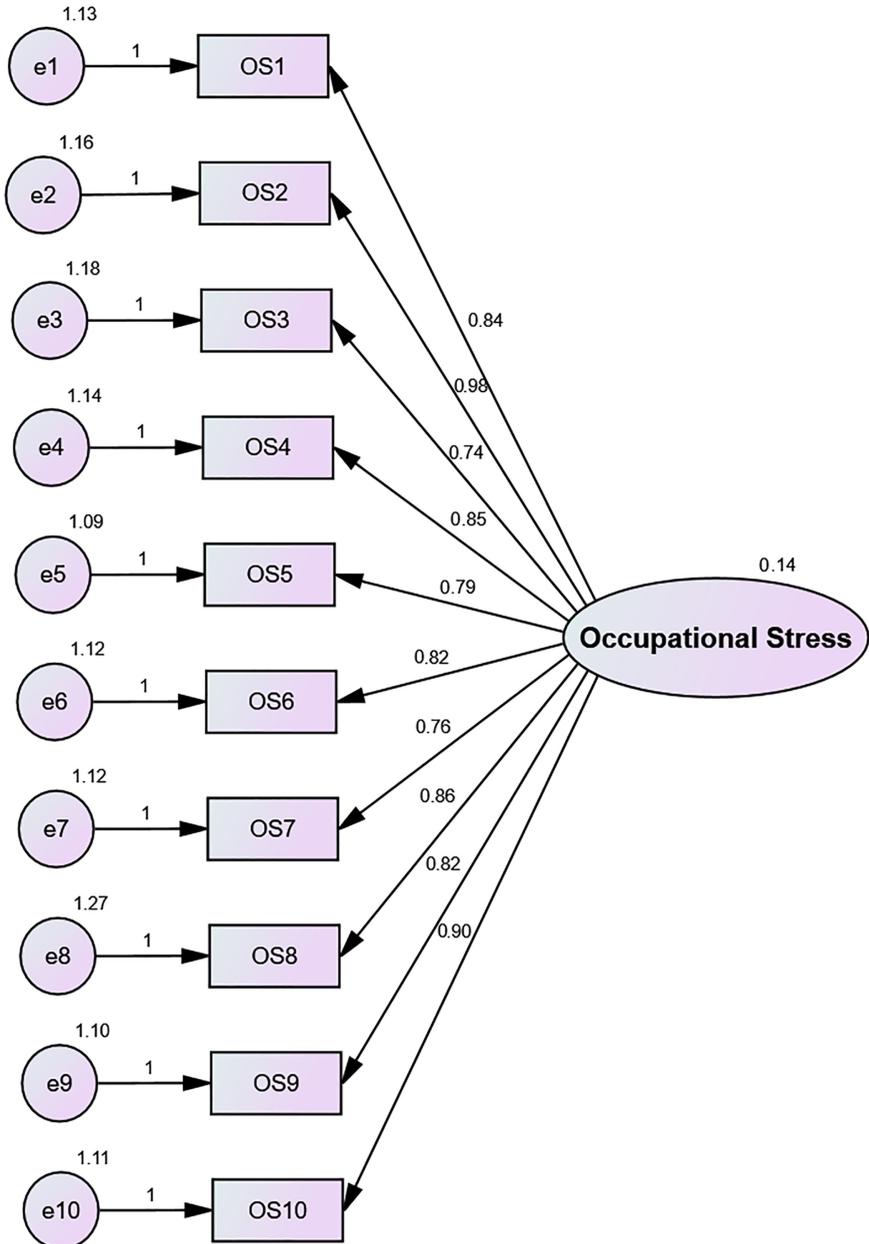


Figure 4.
Measurement model of
OS instrument

Source(s): Figure by authors

Table 14.
Summary table of
validity results of OS
instrument

Sl. no.	Item(s) of OS instrument	Factor item	CFA loading
1	Is it easy for you to raise concerns that you're having at work?	OS1	0.840
2	Feelings about your ability to direct your own job and make meaningful contributions to its outcomes	OS2	0.980
3	It's difficult to get my job done because of all the meetings I'm required to attend	OS3	0.740
4	I've got enough time to get everything done	OS4	0.850
5	I get enough time to relax and rest outside of work	OS5	0.790
6	The amount of work assigned to me seems appropriate	OS6	0.820
7	I have everything I need to carry out my job properly	OS7	0.760
8	I feel stressed out overall	OS8	0.860
9	I'm satisfied with the pace of my work	OS9	0.820
10	I have everything I need to carry out my job properly	OS10	0.900

Source(s): Table by authors; Statistically analyzed data

consistency of 0.740, the validity of the question “How satisfied are you with the degree of control and involvement you have over the work you do?” suggests that all items are reliable.

10.4 Confirmatory factor analysis for employee well-being

Table 15 enumerates the values of validity assessment of the EWB Instrument questionnaire item-wise. Meanwhile, the CFA value of “Occupational Stress” falls between 0.790 and 0.960, there are no items deleted as the values have fulfilled the requirement of over 0.40. The internal consistency of all variables indicated that all items endured well with the internal consistency of 0.790 while the variable with the topmost validity is “I am satisfied with my organization’s overall wellness offerings” as demonstrated in Figure 5.

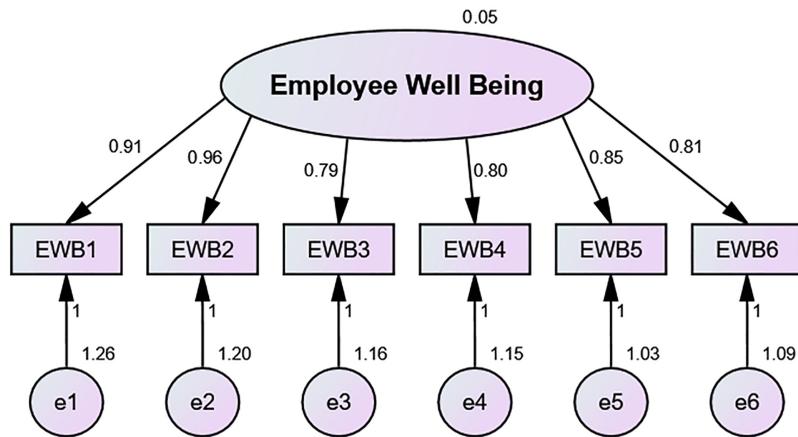
11. Conclusion

Research focused mostly on how workplace stress affects productivity. Workload was shown to be the single most influential factor in determining employee output. All workers clearly and significantly decreased their output as a direct effect of work-related stress. The study’s findings show that employees of both sexes experience stress in the job. Workers of all ages agree that stress in the workplace has a deleterious effect on efficiency. It is the duty of each given company to aid its workers in managing the stress they inevitably encounter on the job. In order to combat stress, primary- and secondary-level intervention programs and other stress management strategies have been implemented. The stress alleviation program, which

Sl. no.	Item(s) of EWB instrument	Factor item	CFA loading
1	My organization is committed to the wellness of its employees	EWB1	0.910
2	I am satisfied with my organization’s overall wellness offerings	EWB2	0.960
3	I am able to communicate my emotions constructively	EWB3	0.790
4	I feel overwhelmed with my workload	EWB4	0.800
5	I am often anxious at work	EWB5	0.850
6	My team encourages open discussion of anxiety and stress at work	EWB6	0.810

Table 15.
Summary table of
validity results of EWB
instrument

Source(s): Table by authors; Statistically analyzed data



Source(s): Figure by authors

Figure 5.
Measurement model of
EWB instrument

includes mindfulness training, resilience training, psychological intervention and behavioural intervention, is put into practice and appears to be quite effective at enhancing employees' job performance.

References

- Borg, M.G., Riding, R.J. and Falzon, J.M. (1991), "Stress in teaching: a study of occupational stress and its determinants, job satisfaction and career commitment among primary school teachers", *Educational Psychology*, Vol. 11, pp. 59-75.
- Dodanwala, T.C., San Santoso, D. and Shrestha, P. (2022), "The mediating role of work-family conflict on role overload and job stress linkage", *Built Environment Project and Asset Management*, Vol. 12 No. 6, pp. 924-939.
- Eddy, C.L., Herman, K.C., Huang, F. and Reinke, W.M. (2022), "Evaluation of a bibliotherapy-based stress intervention for teachers", *Teaching and Teacher Education*, Vol. 109, 103543.
- Greif, S. and Palmer, S. (2022), "Stress and stress management in coaching", in *International Handbook of Evidence-Based Coaching*, Springer, Cham, pp. 863-876.
- Hakanen, J.J., Peeters, M.C.W. and Perhoniemi, R. (2011), "Enrichment processes and gain spirals at work and at home: a 3-year cross-lagged panel study", *Journal of Occupational and Organizational Psychology*, Vol. 84 No. 1, pp. 8-30, doi: [10.1111/j.2044-8325.2010.02014.x](https://doi.org/10.1111/j.2044-8325.2010.02014.x).
- Hobfoll, S.E. (2011), "Conservation of resource theory: its implication for stress, health and resilience", in Folkman, S. (Ed.), *The Oxford Handbook of Stress, Health and Coping*, Oxford University Press, New York, pp. 127-147.
- Ivancevich, J.M., Matteson, M.T., Freedman, S.M. and Phillips, J.S. (1990), "Worksite stress management interventions", *American Psychologist*, Vol. 45, pp. 252-261.
- Keković, M.T., Peličić, D.N. and Radević, S.R. (2022), "Causes of stress in healthcare workers in hospital institutions", *Hospital Pharmacology-International Multidisciplinary Journal*, Vol. 9 No. 1, pp. 1133-1142.
- Kolbell, R.M. (1995), "When relaxation is not enough", in Murphy, L.R., Hurrell, J.J., Sauter, S.L. and Keita, G.P. (Eds.), *Job Stress Interventions*, American Psychological Association, Washington, DC, pp. 31-43.
- Meng, Q. and Wang, G. (2018), "A research on sources of university faculty occupational stress: a Chinese case study", *Psychology Research and Behavior Management*, Vol. 11, p. 597.

-
- Mroczek, D.K., Stawski, R.S., Turiano, N.A., Chan, W., Almeida, D.M., Neupert, S.D. and Spiro, A. III (2015), "Emotional reactivity and mortality: longitudinal findings from the VA normative aging study", *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, Vol. 70 No. 3, pp. 398-406, doi: [10.1093/geronb/gbt107](https://doi.org/10.1093/geronb/gbt107).
- Murphy, L.R. and Sauter, S.L. (2003), "The USA perspective: current issues and trends in the management of work stress", *Australian Psychologist*, Vol. 38, pp. 151-157.
- Newman, J.E. and Beehr, T.A. (1979), "Personal and organizational strategies for handling job stress: a review of research and opinion", *Personnel Psychology*, Vol. 32, pp. 1-43.
- Olivier, M.A.J. and Venter, D.J.L. (2003), "The extent and causes of stress in teachers in George region", *South African Journal of Education*, Vol. 23 No. 3, pp. 186-192.

Further reading

- Bond, F.W. and Bunce, D. (2000), "Mediators of change in emotion-focused and problem-focused worksite stress management interventions", *Journal of Occupational Health Psychology*, Vol. 5, pp. 156-163.

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