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Research paper



Social Support as A Moderator of the Relationship between Work Family Conflict and Family Satisfaction

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Abstract

The issue of psychological distress is a particular concern for many people, especially workers. However, this issue has not received the attention it deserves. The aim of this study is to investigate the relationship between psychosocial work environment (job control and job demand) and its role in predicting psychological distress (depression, anxiety and stress). A questionnaire survey approach was used as a method of quantitative data collection involving 148 teachers from Kelantan, East Coast of Malaysia. The results revealed a significant correlation between the psychosocial work environment and psychological distress. Multiple regression results also indicated that job control and job demands explained 13%, F (2,145) = 5.37, p <0.01 and 14%, F (2,145) = 3.52, p <0.05 of the variance in teachers' anxiety and stress, respectively. The results are expected to contribute to the workers and organisations to identify risk potentials and protective factors as guidelines in developing a strategic plan to improve the health of workers.

Keywords: Psychosocial Work Environment; Psychological Distress; Stress.

1. Introduction

Over the last four decades of the 20th century, the nature of work has changed dramatically. These changes affect human psychology, particularly in terms of psychological distress. Psychological distress can cause serious health problems such as depression, psychometric disease, anxiety, etc. (1). Furthermore, the problem of psychological distress can affect the development of the organization that such as absenteeism (2), the intention to quit (3), lack of involvement (4) and diminished job performance (5).

In this study, the researchers focused on the psychological distress of workers in Malaysia. According to Barlow & Durand (6), psychological distress is a general stress that is measured as a combination of depression and anxiety. Psychological distress is a combination of depression and anxiety (7). Lazarus and Folkman (8) claimed the stress increases when an individual is unable to accept the burden of the environment.

This study investigates the psychosocial work environment and psychological distress among workers. De Simone et al.(9) reported that workers are facing a problem of physical and psychological well-being. Although this is prominent in Western countries, psychological distress is increasing in Asian countries. In Malaysia, the Malaysian National Health Morbidity Survey (NHMS) (2015) reported that 29.2% of workers are suffering from mental illness due to psychological distress (10). This global issue has had an adverse impact on organisational productivity and worker's health (1).

In the context of Malaysian worker culture, the issue of psychological distress poses a risk to the teaching profession, as a total of 45.8% high school teachers in Malaysia (UKM Medical Centre, 2013) (530 teachers) suffer from a mental disorder (11). This has led some to encourage teachers to withdraw from the teaching profession to change the work environment (12).

In accordance with Malaysia's national development, teachers are burdened with the tasks of School-Based Assessment (PBS), using electronic systems, and having to cope with an unfriendly work environment that suffers from, disciplinary and social problems and lack of management support (10, 13-15). These circumstances disrupt a teacher's health.

Karasek (16) clarified that psychosocial work environment (job demand and job control) is a predictor of individual psychological distress. Based on the Job Demand-Control model, psychological distress occurs mainly when job demand and job control are high (active job) (16). Van and Spruyt (17) suggested that constructs like job demand and job control should be used as predictors to explain the differences in jobs and assist in understanding the mechanisms that affect psychological distress. Jain et al. (18) also pointed out that psychosocial risk can threaten workers' mental health and well-being.

Although the study of the psychological distress issue has been studied extensively (19-21), the psychosocial work environment is still unclear and inconsistent. This is because the work environment is constantly changing according to developments (22). This study is carried out in Malaysia to identify the level of psychological distress of teachers caused by a psychosocial work environment.

The findings of this study are expected to foster awareness to all school stakeholders to identify and assess the causes of the problems faced by teachers in terms of psychological distress. In addition, all parties concerned will become more sensitive to the issue and can develop strategies to reduce the psychological distress faced by teachers.



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2. Literature Review

2.1 Psychosocial Work Environment

Siegrist & Marmot (23) define the psychosocial work environment as the opportunities given to an individual to meet the needs of well-being, productivity and positive self-thoughts. According to Karasek (16), a psychosocial work environment involves job demand and job control.

According to Karasek (16), job demand refers to the workload and priorities given time pressure and role conflicts. Bakker & Demerouti (24) defined "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs. While, job control refers to the worker's ability to control the work activities (16). Willemse et al. (25) said that job control could be linked to the workers' wellness which can help them set goals and motivate personal development.

2.2 Psychological Distress

Psychological distress is defined as a psychological reaction to an unpleasant situation and the dangers of working pressure (26). It also refers to a mental state which combines feelings of depression and anxiety (7, 27-30) and may involve anxiety (31) and/or depression (32).

According to Morrison (33), depression is the reduction of the normal mood. It disturbs daily life and normal functioning (34). Zunker (35) says that anxiety produces physical and psychological reactions and unpleasant things. While French et al. (36) stipulate that the actual stress is due to the compatibility between the skills and capabilities of workers' job requirements and situations in the workplace. Workers who do not have proper qualifications will suffer tremendous stress at work (37).

In a stressful working condition, depression, anxiety and stress have been recognised as important outcome measures. Many studies have looked at the association between psychological work exposure and these psychological symptoms (38).

2.3 Psychosocial Work Environment and Psychological Distress

Iennaco et al. (39) found that high job demand can lead to depression. Meanwhile, low job control is not related to workers' depression. Heavy industry workers are unable to manage the psychological exposure such as changes in the work environment causing workers to quit. Boschman et al.(40) also found that supervisors in construction were more depressed than construction workers. This is because the supervisor contractor has high working demands associated with an excessive work time of 44 to 70 hours a week, but they have good work control.

In Asian studies, Kitaoka-Higashiguchiet al.(41) showed that factory managers experience higher depression due to increased job demand. In addition, Yakub & Sidik (21) found that job stress and anxiety prevailing among crane operators when psychological demand increases and job control decreases. They are facing severe anxiety (90.4%) and depression (49.2%). Two-thirds of them do not suffer from stress (69.6%). Crane operators with job control and high job demand easily experience high job strain (56.9%).

Previous studies indicated that there is a positive relationship between psychosocial work environment with psychological distress. When job demands and job control increase, depression, anxiety and stress also increase.

2.4 Job Demand-Control Model

The Job Demand-Control Model was introduced by Karasek (16). Based on the Job Demand-Control Model (16), there are three types of work comprising active work (high demand/high control), passive work (low demand/low control) and low stress (low demand/high control). This model suggests that low job stress was associated with better health. While active and passive working conditions associated with a risk of poor health (42).

Job Demand-Control Model (16) has been widely used in worker health psychology research that is associated with the health and worker's welfare since the 1980s (43). This model identifies two aspects of the work environment which is job demand and job control. Based on the hypothesis of strain, the Job Demand-Control (JDC) comprises four categories of stress; high job strain, low job strain, active job and passive job (44).

High job demand and low job control showed high job strain. Low job strain occurs when a worker has low job demand and high job control. Active job occurs when there is a combination of high job demand and high job control. While passive job occurs when job demand and job control are low. High job strains are risk factors to those with poor physical and psychological well-being (44).

As a conclusion, this theory can explain that workers suffering high job demand and low job control will have a negative impact on their health and wellness.

2.5 Research Hypotheses

H1: There is a significant difference in levels of psychological distress according to gender.

H2: There is a significant difference in levels of psychological distress according to marital status.

H3: There is a significant correlation between psychosocial work environment and teachers' psychological distress (depression, anxiety & stress)

H4: Job demand and job control significantly predict depression, anxiety and stress.

3. Methodology

This quantitative study uses a survey approach to obtain information relating to the factors of psychological distress among teachers in Terengganu.

3.1 Participants and Procedure

Using random sampling, a total of 148 respondents participated in the study comprising 27 (18%) male and 121 (82%) female teachers. Overall respondents aged around 20 to 55 years with an average age of 45 years. The majority of respondents are married (n = 140, 94.6%), while four respondents (2.7%) are single and four respondents (2.7%) separated. A total of 13 respondents (8.8%) had no children and the rest have one (n = 15, 10.1%), two (n = 10, 6.8%), three (n = 19, 12.8%), four (n = 38, 25.7%) and a maximum of five and above (n = 53, 35.8%). For the analysis of years of work experience, the majority (n = 117, 79.1%) have been serving 11 years and above, four respondents (2.7%) between 3-5 years, 12 respondents (8.1%) between 6-8 years and 13 (8.8%) between 9-10 years.

Table 1:	Demographic	Profile
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rube 1. Demographic Frome							
Demographic Profile	Frequency (N)	Percentage (%)					
Gender							
Male	27	18					
Female	121	82					
Age							
20-25	2	1.4					
26-30	5	3.4					
31-35	15	10.1					
36-40	24	16.2					
41-45	38	25.7					
46-50	33	22.3					
51-55	27	18.2					
56>	4	2.7					
Marital Status							
Married	140	94.6					
Single	4	2.7					
Widow	4	2.7					

Number of Children		
No	13	8.8
1	15	10.1
2	10	6.8
3	19	12.8
4	38	25.7
5 >	53	35.8
Work Experience		
< 2	2	1.4
3-5	4	2.7
6-8	12	8.1
9-10	13	8.8
11>	117	79.1

3.2 Instrument

3.2.1 Job Content Questionnaire (JCQ) Scale

The Job Content Questionnaire (JCQ) (45) contains 14 items of the Malay version which was translated by Ibrahim (46). This questionnaire measures the psychosocial work environment of job demand and job control. Examples of JCQ item is "I am free of conflicting demands from others" (job demand) and "My job allows me to make my own decision" (job control). This scale uses a scale of four points Likert scale, 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. The index reliability scale in the pilot study is 0.65 (job demands) and 0.79 (job control).

3.2.2 Depression, Anxiety and Stress Scale (DASS) Scale

Depression, Anxiety and Stress Scale (DASS) (Lovibond & Lovibond, 1995) is a measurement of depression, anxiety and stress. This study uses a 21 item of the Malay version which has been translated by Musa et al. (47). Examples of items DASS is "I could not seem to experience any positive feeling at all" (depression), "I was aware of dryness of my mouth" (anxiety), and "I found it hard to wind down" (stress). This scale uses of four points Likert scale, 0 = never, 1 = slight, 2 = sometimes, 3 = very often. The index reliability scale in the pilot study is 0.89 (depression), 0.88 (anxiety) and 0.93 (stress).

4. Results and Findings

The data was analysed using Statistical Package for the Social Sciences (SPSS) version 20.0. Pearson correlation analysis was used to determine the relationship between psychosocial work environment with psychological distress. T-Test and Analysis of Variance (ANOVA) were conducted to investigate gender and marital status differences in psychological distress. Meanwhile, multiple regression analysis were performed, and regression analysis was used to identify predictive factors for psychological distress.

4.1 Levels of Psychological Distress According to Gender.

Tables 1, 2 and 3 present the results of independent sample t-test comparing the different levels of psychological distress (depression, anxiety and stress) by respondents. There were no statistically significant gender difference in depression (t (148) = -1.005, p > 0.05), anxiety (t (148) = -0.882, p> 0.05) and stress (t(148) = -0.371, p>0.05). Therefore, the result rejected Hypothesis 1.

Table 1: T-Test Results Comparing Males and Females' Levels of Depression

Gender		n	Mean	t	df	Sig
Depression	Male	27	1.87	-1.005	146	.316
	Female	121	2.06			
*171	maan diffor		:: f: t	-+	05	

The mean difference is significant at values 0.05

Table 2: T-Test Results Comparing Males and Females' Levels of Anxiety

Gender		n	Mean	t	df	Sig
Anxiety	Male	27	2.06	882	146	.376
	Female	121	2.24			

*The mean difference is significant at values 0.05

Table 3: T-Test Results Comparing Males and Females' Levels of Stress	SS
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Ge	nder	n	Mean	t	df	Sig	
Ctures	Male	27	2.30	371	146	.711	
Stress	Female	121	2.37				
*The mean difference is significant at values 0.05							

The results showed that there were no differences between male and female teachers for psychological distress. However, female teachers showed a higher mean value for the level of psychological distress. This is consistent with previous studies that female workers were more prone to psychological symptoms than male workers (48-50; 51). This is possibly due to caring for their families and not being able to balance working life with the family environment (50). Besides that, female workers get more workload (73%) than males worker (49).

In contrast, other studies have described higher levels of psychological distress (depression) among males as compared to females (52-53). Nwimo & Onwunaka (54) found that male workers are facing psychological distress (stress) due to emotional, physical, social and mental health in the working environment. In such cases, researchers claimed that males are not as efficient in coping with stressful situations, nor do they have as much social support. These researchers argued that the absence of any significant sex differences in psychological distress levels may be attributed to the characteristics of the participants as well as the fact that both males and females may now face common stressors.

4.2 Levels of Psychological Distress According To Marital Status.

Tables 4, 5 and 6 present the ANOVA's findings. The results revealed that there was no statistically significant difference between marital status on psychological distress (F (112.276=0.472, p> 0.01; F (144.424=0.620, p> 0.05; F (149.122=0.636, p>0.05). Divorced/widowed teachers (m=2.87) reported higher levels of psychological distress compared to married teachers (m=2.38) and single teachers (m=1.63). Thus, Hypothesis 2 was rejected.

Table 4: ANOVA Results Comparing Levels of Depression with Regards to Marital Status

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.093	3	.364	.472	.702
Within Groups	111.183	144	.772		
Total	112.276	147			

The mean difference is significant at values 0.05

Table 5: ANOVA Results Comparing Levels of Anxiety with Regards to Marital Status

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.841	3	. 614	.620	.603
Within Groups	142.583	144	.990		
Total	144.424	147			

*The mean difference is significant at values 0.05

Table 6: ANOVA Results Comparing Levels of Stress with Regards to Marital Status

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.950	3	. 650	.636	.593
Within Groups	147.172	144	1.022		
Total	149.122	147			

*The mean difference is significant at values 0.05

In terms of marital status difference in psychological distress, divorced/widowed teachers (m=2.87) reported higher levels of psychological distress compared to married teachers (m=2.38) and single teachers (m=1.63). This result was consistent with previous studies (55-57). Divorced individuals tend to be depressed because they have no supporters and are lonelier 57). Talaei et al. (56) also found higher depression levels in single/divorced as compared to married individuals because they have no social network on which one can depend. Divorce, separation, and loss of a spouse have been identified as some of the most stressful and disruptive events in the family life cycle because they were more likely to have both employment and family caregiving roles compared to workers with only an employment role (58)

In contrast, workers who were married had higher levels of life satisfaction. Although being married may provide more support and satisfaction it also comes with certain responsibilities which could cause worries and stress during deployment (59). In addition, Manjula (60) stated that married workers are more stressed when they lose control and find it difficult to make decisions.

4.3 Psychosocial Work Environment and Teachers' Psychological Distress

Table 7 shows the mean, standard deviation and correlations between variables including predictor variables job control and job demand, as well as criterion variables (depression, anxiety and stress). All were significant and correlated in the expected direction. Job control was significantly positively correlated with depression (r = 0.32), anxiety (r = 0.49) and stress (r = 0.40). While, job demand was significantly negative correlated with depression (r = -0.52), anxiety (r = -0.24) and stress (r = -0.83). Thus, Hypothesis 3 was accepted. Results indicated that respondents experienced higher stress (M=2.36) compared to depression (M=2.02) and anxiety (M=2.21). Descriptive analysis and correlations between all variables are shown in Table 7.

 Table 7: Means, Standard Deviation and Correlations Between Studied

 Variable

Mean	SP	1	2	3	4	5
5.72	0.61		.38**	.32**	.49**	.00**
4.97	0.82	.38**		52**	24**	83**
2.03	0.87	.32**	35**		.80**	.83**
2.21	0.99	.50**	24**	.80**		.82**
2.36	1.00	.40**	83**	.82**	.82**	
	5.72 4.97 2.03 2.21	5.720.614.970.822.030.872.210.99	5.72 0.61 4.97 0.82 .38** 2.03 0.87 .32** 2.21 0.99 .50**	5.72 0.61 .38** 4.97 0.82 .38** 2.03 0.87 .32** 35** 2.21 0.99 .50** 24**	5.72 0.61 .38** .32** 4.97 0.82 .38** 52** 2.03 0.87 .32** 35** 2.21 0.99 .50** 24** .80**	5.72 0.61 .38** .32** .49** 4.97 0.82 .38** 52** 24** 2.03 0.87 .32** 35** .80** 2.21 0.99 .50** 24** .80**

Notes: SD, standard deviation; N=148. All significant at ^{**} Correlation is significant at the 0.01 level (2-tailed)

The results and findings of this study are consistent with existing literature which revealed that the work of teachers is stressful. Yakub & Sidik (21) found that job stress and anxiety occur among workers when job demand increases and job control decreases. Further, conflict among workers is becoming worse leading to increased stress. Job demand and job control were found to be significantly related to depressive symptoms (61). Meanwhile, Edimansyah et al. (38) stated that job control is not associated with negative emotion.

However, the present study proves that some job aspects are more stressful than others. The level and impact of stressful workrelated factors on the teaching profession have been revealed in this study. Teachers experienced stress in different ways, and the level of stress is associated with job demand and job control. As a conclusion, the psychosocial work environment was significantly correlated with psychological distress.

4.4 Job Demand and Job Control as a Predictor of Depression, Anxiety and Stress

Table 8 presents the results of regression analysis. Results of regression analysis confirmed that psychosocial work environment was a significant predictor of teachers' psychological distress (anxiety and stress). The regression model explained the total variance in predicting depression, anxiety and stress as a whole was 1%, F (147) = 1.68, p >0.05; 13%, F (147) = 5.37, p <0.01 and 14%, F (147) = 3.52, p <0.05. Thus, results partially supported Hypothesis 4.

(Depression, Anxiety and Stress) from Psychosocial work Environment.							
Variable	Standardised Coefficient β						
variable	Depression	Anxiety	Stress				
Control Variables							
Gender	0.91	0.08	0.04				
Marital Status	-0.07	-0.06	-0.05				
No. of Child	-0.02	0.01	0.08				
Predicto	r Variables						
Job Control	0.07	-0.46*	0.42				
Job Demand	0.05	0.08	-0.95*				
\mathbb{R}^2	0.01	0.13	0.14				
F Change	1.68	5.37**	3.52*				
Df	147	147	147				
Note: N = 148. *p <0.05; **p<0.01; ***p< 0.001							

Table 8: Regression Analysis Predicting Psychological Distress (Depression, Anxiety and Stress) from Psychosocial Work Environmen

The main objective of the current study was to investigate the prediction of psychosocial work environment on teachers' psychological distress. Consistent with previous studies (e.g. Edimansyah et al. (38); Boschman et al.(40); Johnston & Lee, (62); Yakub & Sidik (21), respondents in the current study reported higher levels of stress. Willemse et al. (25) stated that workers who have a high workload are less satisfied with the work and felt more emotional. Moreover, teachers are more stressed due to the overload task, lack of interpersonal relationship, the nature of work not satisfied, larger size class, low student discipline and poor examination settings (63). Thus, Makhbul & Khairuddin (1) emphasised that stress is a global issue that gives more impact on organisational productivity and worker health. Besides that, in southern Ontario, teachers' anxiety occurs when they lack professional knowledge, job security and workload associated with the students' behaviour. Although teachers can manage the classroom, in reality, they only have some control over the student's behaviour. Working conditions also contribute to anxiety (64). Therefore, the previous study had proven that job demand and job control predicting the workers stress and anxiety.

In contrast, there is an inconsistent finding with the current study. Chinese and Korean workers were found to have positive depressive symptoms due to higher job demand (65-66). The reason for the higher depressive symptom prevalence among workers was speculated to be the different levels of occupational stress (67). Ferguson et al. (64) showed that factors that lead to teachers suffering from depression are caused by task overloads such as less time for teaching and marking, low student motivation, attitude towards work and the classroom environment.

As a conclusion, job demand and job control from psychosocial work environment predicting teachers' psychological distress (anxiety and stress).

5. Conclusion

The findings of this study are expected to provide awareness among all school stakeholders to identify and assess the causes of the problems faced by teachers in terms of psychological stress. In addition, all interested parties are set to become more sensitive and will be better positioned to develop a strategy to reduce psychological stress faced by teachers. Psychological distress is important from a health promotion/illness prevention perspective because of its links with risk behaviours and physical illness in workers (68) and its propensity to precede more serious mental health disorders (69-71). Psychological distress may be experienced as physical symptoms (72), or manifest as symptoms associated with anxiety, including impaired functioning, diminished performance and lowered productivity (29, 73), increased mortality (74) and depression (75). As this is a cross-sectional study, the results may not be predictive of the longitudinal relationship between self-reported psychological distress and coping. A longitudinal study should be conducted to examine the cause and effect related to the psychosocial work environment, and psychological distress would be beneficial. Moreover, it is important to assess the factors that affect the psychological distress of such populations, including teachers across all of Malaysia.

References

- Makhbul, Z. M., & Khairuddin, S. M. H. H. S. (2014). The effect of occupational stressors on health and individual productivity. *Jurnal Ekonomi Malaysia*, 48(1), 117-131.
- [2] Wu, H., Ge, C. X., Sun, W., Wang, J. N., & Wang, L. (2011). Depressive symptoms and occupational stress among Chinese female nurses: the mediating effects of social support and rational coping. *Research in nursing & health*, 34(5), 401-407.
- [3] Renzulli, L. A., Parrott, H. M., & Beattie, I. R. (2011). Racial mismatch and school type teacher satisfaction and retention in charter and traditional public schools. *Sociology of Education*, 84(1), 23-48.
- [4] Burke, R. J., Koyuncu, M., & Wolpin, J. (2012). Work-family conflict, satisfactions and psychological well-being among women managers and professionals in Turkey. *Gender in Management: An International Journal*, 27(3), 202-213.
- [5] Clarkson, G. P., & Hodgkinson, G. P. (2007). What can occupational stress diaries achieve that questionnaires can't? *Personnel Review*, 36(5), 684-700.
- [6] Barlow, D. H., & Durand, V. M. (2011). *Abnormal psychology: An integrative approach:* Nelson Education.
- [7] Humphris, G., Blinkhorn, A., Freeman, R., Gorter, R., Hoad-Reddick, G., Murtomaa, H., . . . Splieth, C. (2002). Psychological stress in undergraduate dental students: baseline results from seven European dental schools. *European journal of dental education*, 6(1), 22-29.
- [8] Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal and Coping*. New York: Springer.
- [9] De Simone, S., Cicotto, G., & Lampis, J. (2016). Occupational stress, job satisfaction and physical health in teachers. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology*, 66(2), 65-77.
- [10] Suriani, L. (2016). Kesihatan mental pekerja sumbang produktiviti organisasi, Utusan Melayu. Retrieved from http://www.utusan.com.my/berita/nasional/kesihatan-mentalpekerja-sumbang-produktiviti-organisasi-1.380364
- [11] Parlimen. (2012). 530 Guru Dikenalpasti Bardepan Masalah Mental, Utusan Melayu. Retrieved from http://ww1.utusan.com.my/utusan/Parlimen/20121213/pa_03/530guru-dikenal-pasti-berdepan-masalah-mental
- [12] Ummi Kalsom, Z. (2014). Faktor-faktor yang mempengaruhi tekanan kerja dalam kalangan guru sekolah menengah Daerah Hulu Terengganu, Terengganu Darul Iman. Universiti Utara Malaysia.
- [13] Ibrahim, S. S., & Sani, M. (2012). Standard kompetensi guru Malaysia. Paper presented at the Prosiding Seminar Kebangsaan Majlis Dekan Pendidikan IPTA 2012.
- [14] Khan, F. Z. F., & Bakar, S. N. A. (Cartographer). (20 April 2015). Sistem digital, guru terseksa? Retrieved from http://www.sinarharian.com.my/wawancara/sistem-digital-guruterseksa-1.381496
- [15] Zaman, K. K. (2016). Penyakit Murung Bebankan Kehidupan. Kosmo Online., My Kosmo. Retrieved from http://www.kosmo.com.my/kosmo/content.asp?y=2016&dt=0130& pub=kosmo&sec=rencana_utama&pg=ru_01.h
- [16] Karasek, R. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative science* quarterly, 285-308.
- [17] Van Droogenbroeck, F., & Spruyt, B. (2015). Do teachers have worse mental health? Review of the existing comparative research and results from the Belgian Health Interview Survey. *Teaching* and *Teacher Education*, 51, 88-100.
- [18] Jain, A. K., & Sinha, A. K. (2005). General Health in Organizations: Relative Relevance of Emotional Intelligence, Trust, and Organizational Support. *International Journal of Stress Management*, 12(3), 257-273.

- [19] Edimansyah, A. (2008). Assessing And Managing Risk Of Occupational Stress In Male Automotive Assembly Workers In Malaysia. Universiti Sains Malaysia.
- [20] Noor, N. M., Yacob, M. A., Daud, A., Zahiruddin, W. M., & Mohammad, W. (2011). Stress and salivary biomarker among assistant medical officers in Ministry of Health (MOH) hospitals in Kelantan and Terengganu, Malaysia. *Public Health*, 3(8), 634-643.
- [21] Yakub, N. W., & Mohd Sidik, S. (2014). Prevalence and contributing factors of job strain among crane operators in a port container terminal in Malaysia. *Malaysian Journal of Medicine and Health Sciences*, 10(2), 39-46.
- [22] Oei, T. P., Sawang, S., Goh, Y. W., & Mukhtar, F. (2013). Using the depression anxiety stress scale 21 (DASS-21) across cultures. *International Journal of Psychology*, 48(6), 1018-1029.
- [23] Siegrist, J., & Marmot, M. (2004). Health inequalities and the psychosocial environment—two scientific challenges. *Social science & medicine*, 58(8), 1463-1473.
- [24] Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.
- [25] Willemse, B. M., de Jonge, J., Smit, D., Depla, M. F., & Pot, A. M. (2012). The moderating role of decision authority and coworkerand supervisor support on the impact of job demands in nursing homes: A cross-sectional study. *International Journal of Nursing Studies*, 49(7), 822-833.
- [26] De Croon, E. M., Sluiter, J. K., Blonk, R. W., Broersen, J. P., & Frings-Dresen, M. H. (2004). Stressful work, psychological job strain, and turnover: a 2-year prospective cohort study of truck drivers. *Journal of applied psychology*, 89(3), 442.
- [27] Dammeyer, M. M., & Nunez, N. (1999). Anxiety and depression among law students: Current knowledge and future directions. *Law* and Human Behavior, 23(1), 55-73.
- [28] Humphris, G., Jones, C., Skirrow, P., Griffiths, R. D., Ingleby, S., Eddleston, J., ... & Gager, M. (2004). Post-traumatic stress disorder-related symptoms in relatives of patients following intensive care. *Intensive care medicine*, *30*(3), 456-460.
- [29] Wong, J. G., Cheung, E. P., Chan, K. K., Ma, K. K., & Wa Tang, S. (2006). Web-based survey of depression, anxiety and stress in firstyear tertiary education students in Hong Kong. *Australian and New Zealand Journal of Psychiatry*, 40(9), 777-782.
- [30] Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L., . . . Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological medicine*, *32*(06), 959-976.
- [31] Dyrbye, L. N., Thomas, M. R., & Shanafelt, T. D. (2006). Systematic review of depression, anxiety, and other indicators of psychological distress among US and Canadian medical students. *Academic Medicine*, 81(4), 354-373.
- [32] Jorm, A. F., Christensen, H., & Griffiths, K. M. (2006). Changes in depression awareness and attitudes in Australia: the impact of beyondblue: the national depression initiative. *Australian and New Zealand Journal of Psychiatry*, 40(1), 42-46.
- [33] Morrison, E. W. & Robinson, S. L. (1995). Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. *Journal of organizational behavior*, 16(3), 289-298.
- [34] Today, P. (2015). Depressive Disorders, from https://www.psychologytoday.com/conditions/depressive-disorders
- [35] Zunker, V. (2008). Career, work, and mental health: Integrating career and personal counseling. Sage.
- [36] French, J. R., Caplan, R. D., & Van Harrison, R. (1982). *The mechanisms of job stress and strain* (Vol. 7): Chichester [Sussex]; New York: J. Wiley.
- [37] Marzuki, N. A., & Manaf, H. A. (2009). Persepsi kakitangan sektor awam terhadap faktro-faktor yang mempengaruhi prestasi organisai. Jurnal. Jurnal Psikologi Perkhidmatan Awam Malaysia, 4, 127-151.
- [38] Edimansyah, B. A., Rusli, B. N., Naing, L., Rusli, B. A. M., Than, W., & Ariff, B. R. H. T. M. (2008). Self-perceived depression, anxiety, stress and their relationships with psychosocial job factors in male automotive assembly workers. *Industrial health*, 46(1), 90-100.
- [39] Iennaco, J. D., Cullen, M. R., Cantley, L., Slade, M. D., Fiellin, M., & Kasl, S. V. (2009). Effects of externally rated job demand and control on depression diagnosis claims in an industrial cohort. *American journal of epidemiology*, 171(3), 303-311.

- [40] Boschman, J., Van der Molen, H., Sluiter, J., & Frings-Dresen, M. (2013). Psychosocial work environment and mental health among construction workers. *Applied ergonomics*, 44(5), 748-755.
- [41] Kitaoka-Higashiguchi, K., Nakagawa, H., Morikawa, Y., Ishizaki, M., Miura, K., Naruse, Y., . . . Sukigara, M. (2003). Social support and individual styles of coping in the Japanese workplace: an occupational stress model by structural equation analysis. *Stress* and Health, 19(1), 37-43.
- [42] Macklin, D. S., Smith, L. A., & Dollard, M. F. (2006). Public and private sector work stress: Workers compensation, levels of distress and job satisfaction, and the demand-control-support model. *Australian Journal of Psychology*, 58(3), 130-14
- [43] De Lange, A. H., Taris, T. W., Kompier, M. A., Houtman, I. L., & Bongers, P. M. (2003). " The very best of the millennium": longitudinal research and the demand-control-(support) model. *Journal of occupational health psychology*, 8(4), 282-305.
- [44] Karasek, R., & Theorell, T. (1992). Healthy work: stress, productivity, and the reconstruction of working life. New
- [45] Karasek, R. A. (1985). Job content instrument: Questionnaire and user's guide (Rev. 1.1). Los Angeles: University of Southern California.
- [46] Ibrahim, R. Z. A. R. (2012). Psychosocial work environment, organisational justice and work family conflict as predictors of Malaysian worker wellbeing. Victoria University, Melbourne Australia.
- [47] Musa, R., Fadzil, M. A., & Zain, Z. (2007). Translation, validation and psychometric properties of Bahasa Malaysia version of the Depression Anxiety and Stress Scales (DASS). ASEAN Journal of Psychiatry, 8(2), 82-89.
- [48] Siddiqui, F. A. (2013). Occupational stress in teachers: a comparative study of public and private schools in
- [49] Deasy, C., Coughlan, B., Pironom, J., Jourdan, D., & Mannix-McNamara, P. (2014). Psychological distress and coping amongst higher education students: A mixed method enquiry. *European Educational Research Association.*, 9(12), 115-193.
- [50] Anbu, A. (2015). Professional Stress of Higher Secondary School Teachers. *International Journal of Multidisciplinary Research and Development*, 2(1), 10-12.
- [51] Wahed, W. Y. A., & Hassan, S. K. (2017). Prevalence and associated factors of stress, anxiety and depression among medical Fayoum University students. *Alexandria Journal of Medicine*, 53(1), 77-84.
- [52] Ceyhan, E., & Ceyhan, A. A. (2011). Loneliness and depression levels of students using a university counseling center. *Education* and Science, 36(160), 81-92.
- [53] Michael, K. D., Huelsman, T. J., Gerard, C., Gilligan, T. M., & Gustafson, M. R. (2006). Depression among college students: Trends in prevalence and treatment seeking. *Counseling and Clinical Psychology Journal*, 3(2), 60-70.
- [54] Nwimo, I. O., & Onwunaka, C. (2015). Stress among Secondary School Teachers in Ebonyi State, Nigeria: Suggested Interventions in the Worksite Milieu. *Journal of Education and Practice*, 6(26), 93-100.
- [55] Al Khatib, S. A. (2013). Satisfaction with life, Self-esteem, gender and marital status as predictors of depressive symptoms among United Arab Emirates college students. *International Journal of Psychology and Counselling*, 5(3), 53-61.
- [56] Talaei, A., Fayyazi, M. R., & Ardani, A. R. (2009). Depression and its correlation with self-esteem and social support among Iranian university students. *Iranian Journal of Psychiatry*, 4(1), 17-22.
- [57] Esnard, T., & Mohammed, L. (2014). Socio-Demographic Background, Social Support and Depression Levels among Undergraduate Prospective Teachers in Trinidad and Tobago. *Caribbean Journal of Psychology*, 6(1), 21-42.
- [58] Honda, A., Abe, Y., Date, Y., & Honda, S. (2015). The impact of multiple roles on psychological distress among Japanese workers. *Safety and health at work*, 6(2), 114-119.
- [59] Cardozo, B. L., Crawford, C. G., Eriksson, C., Zhu, J., Sabin, M., Ager, A., . . . Kaiser, R. (2012). Psychological distress, depression, anxiety, and burnout among international humanitarian aid workers: a longitudinal study. *PloS one*, 7(9), e44948. doi: https://doi.org/10.1371/journal.pone.0044948
- [60] Manjula, C. (2012). A study on personality factors causing stress among school teachers. M.Phil. Dissertation, Mother Teresa Women's University, Kodaikanal, India.
- [61] Saijo, Y., Yoshioka, E., Kawanishi, Y., Nakagi, Y., Itoh, T., & Yoshida, T. (2016). Relationships of job demand, job control, and

social support on intention to leave and depressive symptoms in Japanese nurses. *Industrial health*, 54(1), 32-41.

- [62] Johnston, D. W., & Lee, W.-S. (2013). Extra status and extra stress: Are promotions good for us? *Industrial & Labor Relations Review*, 66(1), 32-54.
- [63] Baraza, O. T., Simatwa, E. M. W., & Gogo, J. O. (2016). Levels of Stress among Secondary School Teachers and its
- [64] Ferguson, K., Frost, L., & Hall, D. (2012). Predicting teacher anxiety, depression, and job satisfaction. *Journal of teaching and learning*, 8(1), 27-42.
- [65] Gao, Y. Q., Pan, B. C., Sun, W., Wu, H., Wang, J. N., & Wang, L. (2012). Depressive symptoms among Chinese nurses: prevalence and the associated factors. *Journal of advanced nursing*, 68(5), 1166-1175.
- [66] Yoon, S. L., & Kim, J. H. (2013). Job-Related Stress, Emotional Labor, and Depressive Symptoms Among Korean Nurses. *Journal* of Nursing Scholarship, 45(2), 169-176.
- [67] Yoshizawa, K., Sugawara, N., Yasui-Furukori, N., Danjo, K., Furukori, H., Sato, Y., . . . Sasaki, M. (2016). Relationship between occupational stress and depression among psychiatric nurses in Japan. Archives of environmental & occupational health, 71(1), 10-15.
- [68] Adams, T. B., Wharton, C. M., Quilter, L., & Hirsch, T. (2008). The association between mental health and acute infectious illness among a national sample of 18-to 24-year-old college students. *Journal of American College Health*, 56(6), 6
- [69] Horwitz, A. V. (2007). Distinguishing distress from disorder as psychological outcomes of stressful social arrangements. *Health:*, 11(3), 273-289.
- [70] Sami, A., Jusoh, A., Mahfar, M., Qureshi, M. I., & Khan, M. M. (2016). Role of Ethical Culture in Creating Public Value. International Review of Management and Marketing, 6(4S).
- [71] Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current opinion in psychiatry*, 20(4), 359-364.
- [72] Donaghy, M. (2004). Symptoms and the perception of disease. *Clinical medicine*, 4(6), 541-544.
- [73] Chandavarkar, U., Azzam, A., & Mathews, C. A. (2007). Anxiety symptoms and perceived performance in medical students. *Depression and anxiety*, 24(2), 103-111.
- [74] Cuijpers, P., Smit, F., & Van Straten, A. (2007). Psychological treatments of subthreshold depression: a meta-analytic review. *Acta Psychiatrica Scandinavica*, 115(6), 434-441.
- [75] Garlow, S. J., Rosenberg, J., Moore, J. D., Haas, A. P., Koestner, B., Hendin, H., & Nemeroff, C. B. (2008). Depression, desperation, and suicidal ideation in college students: results from the American Foundation for Suicide Prevention College Screening Project at Emory University. *Depression and anxiety*, 25(6), 482-488.