

## **Developing A Model of Stress Sources and Stress Manifestations among Educators in Malaysian Secondary Schools**

*Membangunkan Model Sumber Tekanan dan Manifestasi Tekanan dalam kalangan Pendidik Sekolah Menengah di Malaysia*

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### **Abstract**

*Professional stress is increasing globally and becoming a serious problem. It is the main mental health and safety concern for the teaching profession. This study aimed to determine the relationship and influence of job satisfaction and job stress. Study focused on causal relation between intrinsic and extrinsic satisfaction with stress sources and stress manifestations; and determining the indicator of job satisfaction on job stress by proposed a model. Quantitative approach was used to gather information from 301 educators. Findings revealed a significant relationship between job satisfaction and job stress. Intrinsic and extrinsic satisfaction contributed 26.6% towards job stress. The study reported intrinsic job satisfaction significantly affected stress manifestations while extrinsic job satisfaction significantly affected stress sources. The findings confirmed the intrinsic and extrinsic satisfaction that impacted upon the problem of job stress. Study proposed a model of educator stress for further exploration; implications and recommendation were discussed.*

**Keywords:** *Intrinsic job satisfaction; extrinsic job satisfaction; stress sources; stress manifestation*

### **INTRODUCTION**

Teaching is an important profession that ensures the development of the younger generation of the country in the aspects of cognition, emotion and behaviour. Recently, the phenomenon of professional stress is increasing globally and it is reaching a worrying stage, affecting the majority of professions in all countries. Stress that is present in the different professions is defined as occupational stress. It is considered as an uncomfortable emotional state (Angelica, 2015). Numerous studies claimed that occupational stress happens when an employee feels that his/her resources are too low to face possible requirements of the respective labour activity (Angelica, 2015). Studies on occupational stress suggest that teaching is one of the key professions where the employees are affected by work related stress at one time or another (Tahseen, 2010). Educators' liability is becoming more challenging nowadays in many perspectives, not only from the world of education but also from society that

put great expectations on educator. Emotional stability is needed in implementing responsibilities given to educators (Yusof, 2011).

Stress has been seen as a factor that increasingly affects individuals of a society (Pocinho & Capelo, 2009). According to Powell and Cheshire (2008), the National Union of Teachers reported that stress is one of the biggest problems faced by educators, and that it is the major health and safety concern in four out of the five schools investigated. Compared to other occupational groups such as doctors, dentists and nurses, educators experience lower job satisfaction and poorer mental health. This critical problem requires attention (Yusof, 2011). Educators are well aware that minor stress given in executing their duty will benefit and improve the performance of their work. However, excessive amount of stress would affect the performance of work and could be hazardous to health, both mental and physical.

Stress is defined as the experience by an educator of unpleasant and negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from various aspects of work (Sprengrer, 2011). According to Kyriacou (2000), stress could be assumed as negative emotion which resulted from the educator's recognition of a threat to his/her self-respect or welfare. Educator job stress reflects the experience of unpleasant feelings as a result of teaching work (Kyriacou, 2001; Collie, Shapka, & Perry, 2012). This is not only of great importance to educator but also to the management and policy makers, given that the occupation of teaching has been described being as very stressful by many researchers (Al-Fudail & Mellar, 2008; De Nobile & McCormick, 2008).

Indeed, studies showed that up to one-third of educators are stressed out or extremely stressed out (Collie *et al.*, 2012; Kourmoussi & Alexopoulos, 2016). The numerous stressors that educators are facing include: student behavioural problems; heavy workload; dealing with aggressive parents; preserving discipline; being assessed by others; attending after school and evening meetings; lack of stimulation; and, high external expectations (Harlow, 2008; Klassen & Chiu, 2010; Yaacob & Long, 2015; Kourmoussi & Alexopoulos, 2016). In education, stress is growing progressively because the younger generation nowadays is more difficult to communicate with and this can be very stressful (Mehta, 2013) as it is difficult for the educator to fulfill their mission to transfer knowledge as well as to educate students.

In line with others countries, studies in Malaysia also showed that educators were under high-stress. The main sources of stress have been identified as students' attitude, workload and teaching poorly motivated students (Samad, Hashim, Moin, & Abdullah, 2010; Yaacob & Long, 2015). The stress levels are consistently increasing with the increasing demand from students and parents, as well as the job requirement by Malaysia's Ministry of Education, (Samad *et al.*, 2010). According to Adib (2012),

other stressors for educators also include work pressure, financial problems, depression and loneliness. Ahsan, Abdullah, Fie, and Alam (2009) identified the professional factors that caused stress to the academic staff as being work overload, homework interface, role ambiguity and performance pressure.

The literature review clearly indicated that occupational stress and job satisfaction are interrelated. Numerous factors known to cause stress are also indicators of job satisfaction. If a person is experiencing job dissatisfaction, he/she will be stressed on the job and not productive, thus affecting one's efficiency to deliver 100% towards their work (Mansoor, Fida, Nasir, & Ahmad, 2011). There is a negative relationship between job satisfaction and job stress. Employees who had high levels of job stress had low job satisfaction. However, there are differences between intrinsic and extrinsic job satisfaction that are believed to influence stress sources and stress manifestation, respectively. To understand further the relationship and influence between job satisfaction and job stress, this study aimed to investigate the intrinsic and extrinsic job satisfaction towards stress sources and stress manifestation among secondary schools' educator in Malaysia.

### **Job Satisfaction and Job Stress**

Today, a majority of individuals spend a quarter of their lives working, or in job-related activities resulting in disregarding the stressors that are silently influencing their work and life (Ahsan et al., 2009). Job satisfaction reflects to what extent an individual feels about his/her work, whether he/she enjoys the job, and his/her feeling towards the workplace (Chughati & Perreen, 2013; Sypniewska, 2014). A previous study reported that those employees who were satisfied with their jobs exhibited less stress, less absenteeism, positive contributions and willing to stay with the organization longer (Kamali Cheshmen Jalal et al., 2016). Organizations with satisfied employees are more productive compared to organizations with dissatisfied employees (Hellrigel & Slocum, 2011).

Both intrinsic and extrinsic motivations can help in employee job satisfaction, thus indirectly increasing employee contribution to the organization and their job performance (Edrak, Fah, Gharleghi, & Seng, 2013). Job satisfaction is an indicator of emotional well-being and psychological health. It is an appraisal of the perceived job styles, work environment, and emotional experiences at work. Thus, job satisfaction is an attitude to specific aspects of the job. According to Malik (2013), an employee may be satisfied with certain aspects of the job but dissatisfied with others.

Many aspects of jobs tends to influence one's satisfaction, among others, salary, work environment, work characteristics, organisational decision-making, leadership care,

interpersonal relationship, self-worth, workload, work autonomy, and social recognition (Lund, 2003; Daneshfard & Ekvanian, 2012; Khalid & Mahmood, 2012). Harlow (2008) indicated that the personal performance of an educator was considered to be the most satisfying aspect of teaching. Other factors that were found to contribute to overall satisfaction included extrinsic factors such as sufficient resources, educational facilities, regulations of the school, school administration and teaching curriculum. Additionally, other intrinsic factors strongly influencing individual job satisfaction were achievement, responsibility, growth, advancement and recognition (Foor & Cano, 2011; Matsuoka, 2015; Tran, 2015).

A balance between satisfaction and dissatisfaction must be maintained in any workplace. According to Chandrasekar, Chidambaram, Venkatraman, and Venugopal (2015), organization performance is the outcome of work commitment rooted through job satisfaction. However, dissatisfaction causes individuals to be displeased, unhappy and disengaged in a workplace. Therefore satisfaction must be maximized; while on the other hand, minimizing dissatisfaction.

Previous research showed that teaching is perceived as rewarding by most educators, however many educators claimed a high degree of stress and symptoms of burnout (Stoeber & Rennert, 2008; Skaalvik & Skaalvik, 2015). Employees with low occupational stress have more job satisfaction than employees with high occupational stress (Johnson *et al.*, 2005). Several studies found that job satisfaction affects the employees' job stress and their overall performance in their work (Karadal, Ay, & Cuhadar, 2008; Ahsan *et al.*, 2009; Ahmad *et al.*, 2011). Various studies on educators have explored their job satisfaction and the relationship between professional stress and job satisfaction (Ben-Ari, Krole, & Har-Even, 2003; Klassen & Chiu, 2010; Yaacob & Long, 2015).

Generally, this study aims to identify intrinsic job satisfaction and extrinsic job satisfaction that educators experience in school is supported by the Motivation-Hygiene Theory (Herzberg, 1959) and the Maslow's Hierarchy of Needs (Maslow, 1954). In addition it aimed to determine the educator job stress from the two aspects proposed by Fimian (1984; 1988): stress sources and stress manifestations.

The Herzberg's two-factor theory of motivation indicates that motivation factors and hygiene factors influence employee satisfaction (Alam & Shahi, 2015). This theory is based in part on Maslow's (1954) notion of self-actualization. Maslow's (1954) hierarchy of needs presents job satisfaction in terms of needs fulfilment. On the other hand, the Herzberg *et al.* (1959) two-factor theory explains factors that contribute to job satisfaction focusings on workers' quest for a pleasant work environment and meaningful tasks. There are inter-relations between Herzberg's two-factor theory and Maslow's hierarchy of needs in the satisfaction of an individual's life. Maslow's

hierarchy suggests two groups of needs: (i) deficiency needs; and (ii) growth needs. Within the deficiency needs, each lower need must be met before moving to the next higher level. Herzberg's two-factor theory has been associated to Maslow's hierarchy of needs in that Maslow's higher-order needs (growth needs) are similar to Herzberg's motivation factors, and Maslow's lower order needs (deficiency needs) are similar to Herzberg's hygiene factors.

According to Herzberg (1959), motivation factors are intrinsic factors that lead to job satisfaction, but their absence does not lead to job dissatisfaction. However, hygiene factors are extrinsic factors which will not increase employee satisfaction, but without which employees will feel dissatisfied with their work. Herzberg (2001) found that employees respond to job factors that can create dissatisfaction or satisfaction. Tolerance for job dissatisfaction will increase when satisfaction is met. Herzberg's Theory has important implications to employee and management. It states that in order to increase employees' performance and achieve their needs and satisfaction, principals in schools must provide job factors related to 10 indicators under the motivation-hygiene factors: (1) motivation factors which include achievement, recognition, work itself, responsibility, and advancement; (2) hygiene factors which include interpersonal relations, administration, supervision, salary, working conditions. Herzberg's extrinsic factor (hygiene factor) that are linked to the three basic levels of human satisfaction in the hierarchy of needs; and, the highest level of human needs linked with the Herzberg's intrinsic factors (motivation factor).

## **THE PRESENT STUDY**

This study attempted to determine the relationship and the influence of job satisfaction and job stress among secondary school educators in Malaysia. Two model of educator job stress will be proposed by this study. Job satisfaction was examined from two aspects namely (i) intrinsic job satisfaction (motivation factors) and (ii) extrinsic job satisfaction (hygiene factors). While, stress was divided into two aspects namely, stress sources and stress manifestations. Figure 1 shows the conceptual framework of the present study.

The main objectives of this study were: (1) to investigate the correlation between educator job satisfaction and educator job stress in Malaysian national secondary school from four aspects: intrinsic job satisfaction; extrinsic job satisfaction; stress sources; stress manifestations; (2) to examine the impact of intrinsic and extrinsic job satisfaction on job stress among educator in Malaysian national secondary school; and, (3) to determine which of the indicators of job satisfaction were the significant predictors of job stress among the educator in Malaysian national secondary school by proposed a Model of Stress among Malaysian Educator.

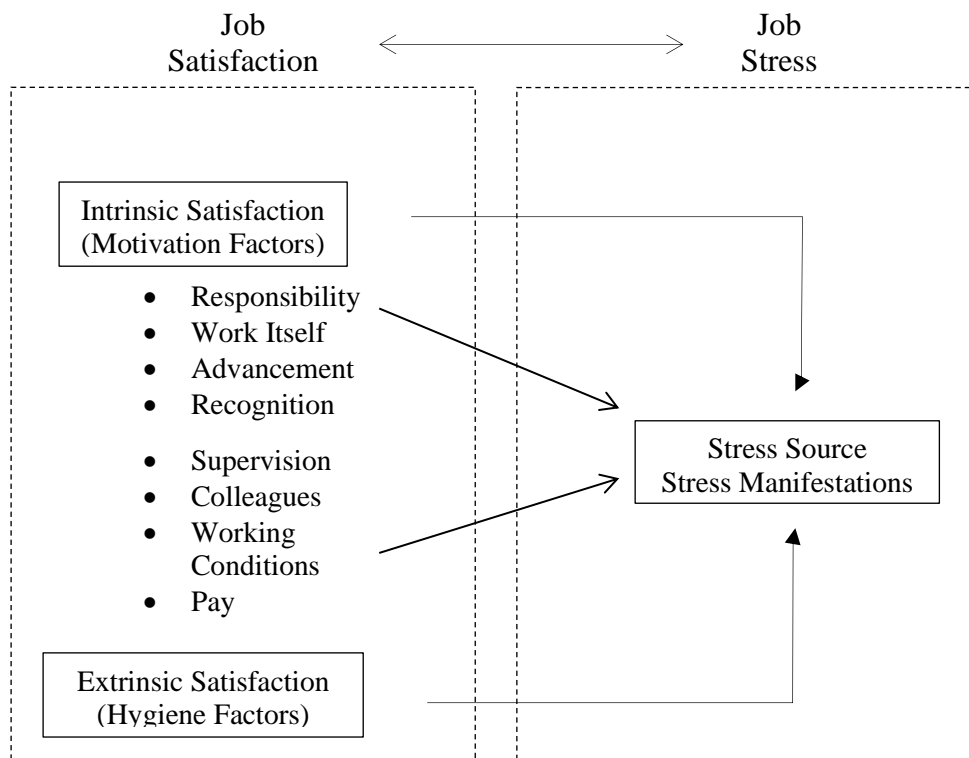


Figure 1: Conceptual framework

## METHODOLOGY

### Research Design

The purpose of the study was to determine the relationship and impact of job satisfaction towards job stress among educator in Malaysian national secondary school, using the quantitative approach. A set of questionnaires was used to collect the information from total 301 respondents (educators). The respondents were randomly selected from total 33 Malaysian national secondary schools in Selangor Malaysia. During the questionnaire session, the researcher explained the purpose of the study and the study confidentiality to all the respondents. The data collected were analysed using descriptive and inferential analysis methods.

### Respondents

Three hundred and one educators aged between 25 - 41 years old were included in this study. The majority, (271) 90%, of the respondents were females, of which, 256 (85%) were bachelor's degree holders, 42 (14%) master's degree holders and 3 (1%) were PhD graduates. A total of 113(37.5%) educators had served more than 21 year in secondary schools; 115 respondents had served between 20 -11 years; and 66



respondents served for less than 10 years. Only 7 respondents had less than 1-year experience.

### **Instrumentation**

Questionnaires were used to collect the information for data analysis. Two sets of instruments were used in the questionnaire to measure educator job satisfaction and educator job stress.

The Teacher Job Satisfaction Questionnaire (TJSQ) (Lester, 1982) was used to measure satisfaction of educators from two aspects: motivation factors and hygiene factors. Motivation factors refer to intrinsic motivation and hygiene factors define extrinsic motivation. This instrument included 66 items (37 positive items; 29 negative items) and the five points Likert-Scale was used to measure this instrument. According to Lester (1982), the motivation factor was measured by four aspects: (1) responsibility; (2) work itself; (3) advancement and (4) recognition; while, the hygiene factor involved five aspects: (1) supervision; (2) colleagues; (3) working condition; (4) pay; and (5) security.

The Teacher Stress Inventory developed by Fimian and Fastenu (1990) was used in this study to measure educator job stress. The Teacher Stress Inventory involves 49 five-point Likert scale items to cover two aspects of job stress: (1) stress sources and (2) stress manifestations. Stress sources include 29 positive items with five indicators: (1) time management; (2) work-related stressor; (3) professional distress; (4) discipline and motivation; and (5) professional investment. For stress manifestations, there are a total of 20 positive items with five indicators: (1) emotional ; (2) fatigue; (3) cardiovascular; (4) gastronomical; and (5) behavioural. The reliability coefficients of the TSI experience clusters were reported to range from 0.75 to 0.88, and for the total scale, the coefficient was 0.93 (Fimian and Fastenu, 1990). Stress sources are also known as external stressor while stress manifestation is related with individual internal stress which involves emotional or personal health.

### **Rasch Analysis for Validity and Reliability**

Table 1 summarizes the fit and reliability indices for the Rasch analysis of the Teacher Job Satisfaction Questionnaire and Teacher Stress Inventory. The summary statistics provided the fit statistics that showed the overall quality of the instrument. According to Fisher (2007), analysis which revealed that item reliability scores ( $>.67$ ), item INFIT mean square values (value 1), item separation scores ( $>3$ ), and cronbrach alpha ( $>.70$ ) fulfilled the requirement of the reliability and fit indices.

Table 1: *Summary statistics for Rasch analysis*

Measured	INFIT MNSQ	Separation	Person Reliability	Cronbrach Alpha
TSI				
Person	1.00	3.83	0.94	0.95
Item	1.00	10.16	0.99	
TJSQ				
Person	1.06	3.45	0.92	0.94
Item	1.01	9.06	0.99	

Note: TSI=Teacher Stress Inventory; TJSQ = Teacher Job Satisfaction Questionnaire; INFIT MNSQ = Infit Mean Square

In additional, the Rating Scale and the partial Credit Scale were used to determine the probability of participants that were well distributed within the rating (Andrich,1978). Table 2 indicates that the Andrich Threshold shows a cascading increase in value from negative to positive. This revealed that respondents could consistently discriminate between response options and understand the differences in the multiple choices.

Table 2: *Rating (Partial) Credit Scale*

Rating (5- point Likert Scale of Questionnaire)	Andrich Threshold	
	TSI	TJSQ
1	none	None
2	-1.33	-1.54
3	-1.04	-.75
4	.66	.40
5	1.71	1.89

Note: TSI=Teacher Stress Inventory; TJSQ = Teacher Job Satisfaction Questionnaire

Rasch Modelling also used to determine whether the items were uni-dimensional, thus providing evidence of internal consistencies to the analysis (Curtis & Boman, 2007). Table 3 shows that the Raw variance result for the item dimensionality test (TSI:47.3%; TJSQ: 36.7%) holds up uni-dimensionality empirically. This variability measurement fulfils the minimum requirement of uni-dimensionality, which is 20%. In support of this diversity is the Unexplained Variance (<15%) which forms the basis of several indicators of a good instrument.



Table 3: Item dimensionality

Standardized Residual variance	Empirical	
	TSI	TJSQ
Raw Variance Explained	47.3	36.7
Raw variances Unexplained		
1 <sup>st</sup> Contrast	8.6	7.6
2 <sup>nd</sup> Contrast	5.6	5.8
3 <sup>rd</sup> Contrast	3.9	3.2
4 <sup>th</sup> Contrast	2.8	2.8
5 <sup>th</sup> Contrast	2.6	2.3

Note: TSI=Teacher Stress Inventory; TJSQ = Teacher Job Satisfaction Questionnaire

### Statistical Analyses

The SPSS software was used to perform influential analyses, which involved Pearson correlation analysis and multi-regression analysis. Pearson correlation analysis was conducted to describe the relationship between the variables and the aspects. Regression analysis was used to determine the predictor and also reported the overall contribution of independent variables to dependents variables.

## RESULTS

The results of this study are presented according to the research objectives. Firstly, the correlation between the variables was reported. Secondly, the impact of job satisfaction towards job stress was examined. Finally, we determined which indicators of job satisfaction would significantly predict stress sources and stress manifestations among educator in Malaysian national secondary school by proposed the model of stress.

### Correlation between Job Satisfaction and Job Stress

Pearson product-moment correlation test was used to determine the relationship between educator job satisfaction and educator job stress in total value and individual aspects. As presented in Table 4, significant positive correlation ( $r=.514$ ;  $p<0.01$ ) was observed between the total value of educator job satisfaction and educator job stress. According to *Guilford's rule of thumb* (Guilford, 1956), the level of correlation between 0.50 - 0.69 indicated moderate or marked correlation.

Table 4: *Correlation between variables: Total value*

		1
1	Job Satisfaction	-
2	Job Stress	.514**

\*\*correlation is significant at the 0.01 level (2-tailed)

In addition, for the relationship between the individual aspects of the variables, all the correlations were statistically negatively significant as shown in Table 5. The correlation across sources was within 0.373- 0.504. The highest correlation was between intrinsic satisfaction (motivation) with stress manifestations ( $r=-.504$ ;  $p<0.01$ ), while the lowest was between intrinsic satisfaction (motivation) with stress sources ( $r=-.373$ ;  $p<0.01$ ). The negative correlation indicated that the increase of educator job satisfaction reduced their stress at work.

Table 5: *Correlation between variables: Individual aspects*

		Intrinsic Satisfaction	Extrinsic Satisfaction
1	Stress Sources	-.373**	-.430**
2	Stress Manifestations	-.504**	-.452**

\*\*correlation is significant at the 0.01 level (2-tailed)

### **Influence of Job Satisfaction on Job Stress**

Regression analysis was used to investigate which of the aspects of job satisfaction (intrinsic satisfaction; extrinsic satisfaction) statistically significantly predicted educator job stress (stress sources; stress manifestation). The purpose of the objective was to understand the overall contribution of job satisfaction on job stress. At the same time, this analysis determined which aspect of satisfaction (intrinsic; extrinsic) would statistically contribute on either stress sources or stress manifestation. The result for each finding was as reported. Three findings are reported: (1) Finding 1: Influence of intrinsic satisfaction and extrinsic satisfaction on overall job stress; (2) Finding 2: Influence of intrinsic satisfaction and extrinsic satisfaction on stress sources; and, Finding 3: Influence of intrinsic satisfaction and extrinsic satisfaction on stress manifestation

**Finding 1: Influence of intrinsic satisfaction and extrinsic satisfaction on overall job stress**

Finding 1 aimed to understand the overall contribution of educator job satisfaction on job stress. The results analysis of variance (ANOVA) shown in Table 6 indicated that the regression model fitted the data at .001 level of significance. Finding indicated that the contributing relation was statistically significant [F(2,298)= 53.93, p<0.001]. This reported that there was significant influence of intrinsic and extrinsic satisfaction to job stress among secondary schools educator. The findings indicated about 26.6% variance in job stress was explained by educator job satisfaction ( $R^2 = 0.266$ ). Another 73.4% of educator job stress was due to other external factors that were not included in this study. Based on Table 6, the standardized beta value result showed that each of the aspects of job satisfaction [intrinsic ( $\beta = -.262$ ,  $t = -2.85$ ;  $p = 0.005$ ); extrinsic ( $\beta = -.275$ ,  $t = -2.99$ ;  $p = 0.003$ )] contributed significantly towards job stress. One unit increase of the standard deviation of intrinsic job satisfaction caused job stress to decrease by .262 unit of standard deviation, while the increase of one unit of standard deviation of extrinsic job satisfaction decreased .275 unit of the standard deviation of job stress.

Table 6: Finding 1 on intrinsic satisfaction and extrinsic satisfaction to job stress

ANOVA	Sum of Square	df	Mean Square	F	Sig
Regression	55585.90	2	27792.95	53.93	0.000
Residual	153582.92	298	515.38		
Total	209168.83	300			
Model Summary	R	R Square	Adjusted R Square	Std Error of the Estimate	
Model 1	.516	.266	.261	22.70	
Coefficients	B	$\beta$	t	Sig t	
Intrinsic Satisfaction	-.653	-.262	-2.85	0.005	
Extrinsic Satisfaction	-.417	-.275	-2.99	0.003	
Constant	257.72		21.78	0.000	

**Finding 2: Influence of intrinsic satisfaction and extrinsic satisfaction on stress sources**

Finding 1 supported the notion that job satisfaction (intrinsic and extrinsic) influenced job stress. Instead of understanding the contribution of job satisfaction towards the overall job stress, finding 2 focused on which of the aspects of job satisfaction would significantly predict the aspect of stress sources (external stressor) on educator job stress. For the F-test, finding 2 indicated that there was a significant relationship between the two predictors with stress sources [ $F(2,298)=33.95, p<0.001$ ]. Regression data fitted the model thus suggesting that there was significant influence of intrinsic and extrinsic satisfaction towards job stress. However, there was only 18.6% ( $R^2=0.186$ ) of the variance on stress sources explained by job satisfaction on the aspect of intrinsic and extrinsic satisfaction. Based on the Guildford's rule of thumb, there was a weak relationship between the two predictors (intrinsic and extrinsic) and job stress. In addition, the results presented in Table 7 showed that only extrinsic job satisfaction (hygiene factors) contributed significantly towards stress sources ( $\beta= -.399, t= -4.11; p=0.000$ ). An increase of one unit standard deviation of extrinsic satisfaction decreased .399 unit of standard deviation of stress sources. On the other hand, intrinsic satisfaction did not contribute individually towards stress sources.

Table 7: Finding 2 on intrinsic satisfaction and extrinsic satisfaction to stress sources

ANOVA	Sum of Square	df	Mean Square	F	Sig
Regression	12098.30	2	6049.15	33.95	0.000
Residual	53104.51	298	178.20		
Total	65202.82	300			
Model Summary	R	R Square	Adjusted R Square	Std Error of the Estimate	
Model 2	.431	.186	.180	13.35	
Coefficients	B	$\beta$	t	Sig t	
Intrinsic Satisfaction	-.052	-.037	-.386	.700	
Extrinsic Satisfaction	-.337	-.399	-4.11	.000	
Constant	144.34		20.74	.000	

**Finding 3: Influence of intrinsic satisfaction and extrinsic satisfaction on stress manifestation**

Finding 3 identified the contribution of the aspects of educator job satisfaction on stress manifestations defined as individual emotional and internal stress. Table 8 showed that the regression data fitted the model where there was a significant relationship between the two aspects of job satisfaction with stress manifestations [F(2,298)=51.48, p<0.001]. This indicated that there was a significant influence of intrinsic and extrinsic job satisfaction on stress manifestations. A total of 25.7% (R<sup>2</sup>=0.257) of the variance of stress manifestations was explained by job satisfaction. Table 8 shows that there was only intrinsic job satisfaction (motivation factors) contributing significantly towards stress manifestation ( $\beta = -.426$ ,  $t = -4.60$ ;  $p = 0.000$ ). An increase of one unit of standard deviation on intrinsic satisfaction would decrease .426 unit of standard deviation on stress manifestations. However, extrinsic satisfaction did not contribute individually toward stress manifestations.

Table 8: Finding 3:intrinsic satisfaction and extrinsic satisfaction to stress manifestations

ANOVA	Sum of Square	df	Mean Square	F	Sig
Regression	17195.46	2	8597.73	51.48	.000
Residual	49769.47	298	167.01		
Total	66964.93	300			
Model Summary	R	R Square	Adjusted R Square	Std Error of the Estimate	
Model 3	.507	.257	.252	12.92	
Coefficients	B	$\beta$	t	Sig t	
Intrinsic Satisfaction	-.601	-.426	-4.60	.000	
Extrinsic Satisfaction	-.079	-.093	-.999	.319	
Constant	113.8		16.83	.000	

Generally, objective 2 clearly showed that intrinsic and extrinsic job satisfaction were statistically influencing job stress among educator in Malaysia. However, intrinsic job satisfaction contributed significantly towards stress manifestation, while extrinsic job satisfaction contributed significantly towards stress sources. Therefore, objective 3 focused on investigating further which of the indicators on extrinsic job satisfaction

were the significant predictors of educator stress sources as shown in Figure 2: Extrinsic job satisfaction on stress source; and, which of the indicators on intrinsic job satisfaction were the significant predictors of educator stress manifestation as shown in Figure 3: Intrinsic job satisfaction on stress manifestation.

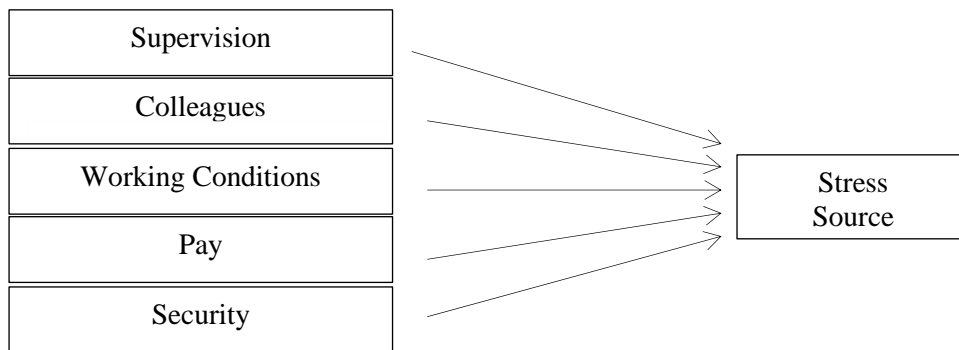


Figure 2: Extrinsic job satisfaction on stress source

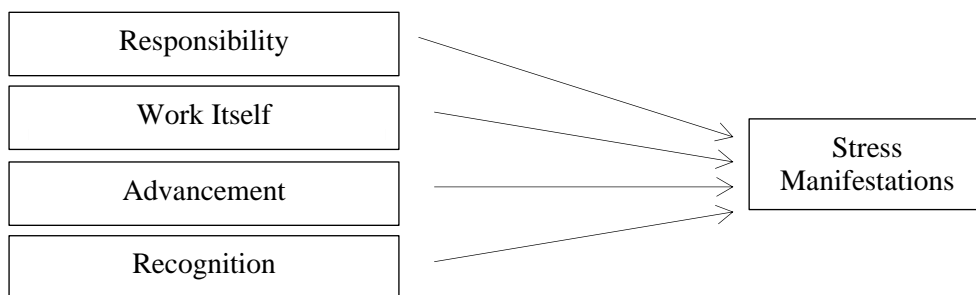


Figure 3: Intrinsic job satisfaction on stress manifestation

### Proposed Model: Model of Stress Source on Educator in Malaysia

Regression analysis was used to: (i) determine the overall influence of extrinsic satisfaction on stress sources; and (ii) the individual contribution of the indicator towards stress sources. The findings shown in Table 9 indicated that the regression model fitted the data at the level of significance [ $F(5,295)=18.86, p<0.001$ ]. Therefore, the five indicators of extrinsic job satisfaction (security; pay; working condition; colleagues; supervision) were believed to have relationship with and contribute to stress sources. A total of 24.2% ( $R^2=0.242$ ) of the stress sources were explained by the five indicators of extrinsic job satisfaction. Among the five indicators, only three: security ( $\beta= -.181, t= -2.94; p=0.004$ ); pay ( $\beta= -.155, t= -2.72; p=0.007$ ); and working condition ( $\beta= -.299, t= -3.64; p=0.000$ ) were statistically significant as individual



predictors of educator stress sources. However, colleagues and supervision did not contribute significantly towards stress sources at the .05 level of significance.

Table 9: Regression analysis for the effect of extrinsic satisfaction to stress sources

ANOVA	Sum of Square	df	Mean Square	F	Sig
Regression	15792.33	5	3158.47	18.86	.000
Residual	49410.48	295	167.49		
Total	65202.81	300			
Model Summary	R	R Square	Adjusted R Square	Std Error of the Estimate	
Model of Stress Sources	.492	.242	.229	12.94	
Coefficients	B	$\beta$	t	Sig t	
Security	-1.52	-.181	-2.94	.004	
Pay	-.590	-.155	-2.72	.007	
Working Condition	-1.03	-.299	-3.64	.000	
Colleagues	.191	.060	.897	.370	
Supervision	-.034	-.017	-.219	.827	
Constant	141.97		20.19	.000	

**Proposed Model: Model of Stress Manifestation on Educator in Malaysia**

Regression analysis was used to determine the overall influence of intrinsic satisfaction on stress manifestations; and, the individual contributions of the indicators towards stress manifestation. The results presented in Table 10 indicated that the regression model fitted the data at the level of significance [F(4,296)=33.81, p<0.001]. Therefore, the four indicators of extrinsic job satisfaction (responsibility; work it-self; advancement; recognition) were believed to have relationship with and contributed to stress manifestation. A total of 31.4% (R<sup>2</sup>=0.314) of the model of stress manifestations was explained by the four indicators of intrinsic job satisfaction. Only two out of four of the indicators: (i)work it-self( $\beta = -.392$ , t= -5.64; p=0.000); and (ii) recognition( $\beta = -.242$ , t= -4.21; p=0.000) statistically contributed individually to educator stress manifestation. However, responsibility and advancement did not contribute significantly towards stress manifestations at the .05 level of significance.

Table 10: Regression analysis for the effect of intrinsic satisfaction to stress manifestations

ANOVA	Sum of Square	df	Mean Square	F	Sig
Regression	20998.55	4	5249.64	33.81	.000
Residual	45966.37	296	155.29		
Total	66964.92	300			
Model Summary	R	R Square	Adjusted R Square	Std Error of the Estimate	
Model of Stress Manifestations	.560	.314	.304	12.46	
Coefficients	B	$\beta$	t	Sig t	
Responsibility	-.317	-.086	-1.39	.166	
Work It-self	-1.37	-.392	-5.64	.000	
Advancement	.527	.100	1.67	.095	
Recognition	-1.79	-.242	-4.21	.000	
Constant	107.63		17.01	.000	

## DISCUSSION AND CONCLUSION

Educator play a key role in educating the younger generation to ensure they are well prepared for the future. However, the problem of teacher retention and burnout continues to be a worldwide problem (Shockley, Watlington & Felsher 2013; Yaacob & Long, 2015; Arogan, 2016). Previous studies described that teaching is a profession that is full of stress which affects individual health and stress has become one of the biggest problems facing educators today (Powell & Cheshire, 2008; Yusof, 2011). On the other hand, the literature review showed that job satisfaction is important for individual job performance and there is an inter-relationship between job satisfaction and job stress (Klassen & Chiu, 2010; Yaacob & Long, 2015). Individuals with low job satisfaction often have stressful problems which consequently influence their job performance and organizational achievements (Bhatti et al., 2011; Hellriegel & Slocum, 2011).

Understanding the relation and influence between job satisfaction from the aspect of intrinsic and extrinsic motivation towards job stress, which included stress sources and stress manifestations, is important especially for policy makers and future researchers. This information is needed to determine the main predictors of educator job stress so that more efficient intervention or induction programs could be formulated. This study aimed to examine the correlation and influence between the two aspects of educator job satisfaction (intrinsic and extrinsic satisfaction) and the

two aspects of educator job stress (stress sources and stress manifestations) from the perception of secondary school educators in Selangor, Malaysia. The findings of this study would provide further insights into the relation and influence of these four aspects.

Correlation analysis in this study indicated that there was a moderate negative correlation between educator job satisfaction and educator job stress. This negative relationship is consistent with the findings of previous studies (Mansoor et al., 2011; De Simone, Cicotto, & Lampis, 2016). Intrinsic and extrinsic satisfaction had statistically negative significance with stress sources and stress manifestations. Increase of job satisfaction reduced educator job stress, individuals felt less stressful when they enjoyed doing their work and were recognized by the organization (Ahmad et al., 2011; Sypniewska, 2014). At the same time, this study also reported that intrinsic and extrinsic satisfaction contributed 26.6% to the overall value of educator job stress. These results confirmed the importance of intrinsic and extrinsic satisfaction towards job stress. There is a need to balance both aspects of satisfaction in any organization (Shockley, Watlington, & Felsher, 2011).

This study also revealed that intrinsic job satisfaction (motivation factors) significantly contributed to stress manifestation. On the other hand, extrinsic job satisfaction (hygiene factors) significantly contributed to stress sources. These findings were supported by the theories of Herzberg (1959) and Maslow (1954). According to Maslow's hierarchy of needs (Maslow, 1954), Maslow's higher-order needs are related with Herzberg's intrinsic motivation; Maslow's lower order needs are related with Herzberg's extrinsic motivation. Stress manifestation refers to individual internal stress or health problem such as emotional problem, experience of physical weakness, misbehaviour, gastronomical system problem or cardiovascular system problem (Fimian, 1984). This manifestation of stressors is influenced by individual intrinsic satisfaction such as feeling of responsibility; recognition by organization; self-achievement which is linked with individual self actualization and self-esteem. Stress sources which refer to external factors such as time management, work-related stressor; teacher-student relationship, promotion opportunities, career development etc, are influenced by individual extrinsic satisfaction including supervision, salary and benefits, management of organization, working condition and interpersonal relations (Fimian & Fastenu, 1990).

Job satisfaction is part of an individual's highest needs. According to Herzberg (2001), employees respond to job factors that can create dissatisfaction or satisfaction. Shockley et al (2011) explained through the Weoghted Balance Satisfier Model that there is a balance that must be maintained in any workplace between satisfaction and dissatisfaction in order to achieve a productive work atmosphere. Consequently, satisfaction must be maximized and dissatisfaction minimized. Intrinsic factors can

satisfy but less of them do not create dissatisfaction, just no satisfaction. Intrinsic factors refer to individual psychological needs as motivator for individual achievement. On another range, the lacking of extrinsic factors will increase dissatisfaction. Extrinsic factor is linked with Maslow's lower-order need that is related with basic needs. Therefore, extrinsic factors such as management; working condition, salary only play a role as employee basic requirements from the organization which will not increase their job satisfaction; however without these basic requirements, the employee will be dissatisfied. Herzberg (2011) indicated that tolerance for job dissatisfaction will increase when the satisfactions are met. To increase job satisfaction, intrinsic motivation must be prioritized by the organization.

The findings reported that indicators of intrinsic satisfaction contributed 31.4% to stress manifestation and two of the four indicators contributed significantly as predictors to stress manifestation: work-itself and recognition. For the stress sources, extrinsic satisfaction such as security, pay, working condition, colleague and supervision, contributed 24.2%. However, only three out of the five were significantly shown as predictors to stress sources, including security, pay and working condition. Career development, insufficient promotion, insecurity are often causes of stress (Hespanhos & Porto, 2005). The contribution of intrinsic and extrinsic satisfaction would balance the job satisfaction and dissatisfaction which would affect the educator job stress in terms of external or internal stressor. Both intrinsic and extrinsic satisfactions play roles as predictors toward sources of stress and stress manifestation. Organization needs to understand the factor of satisfaction and dissatisfaction to solve the educator stress problem.

This study has implications on the schools which was aimed to demonstrate the motivation environment on career to educator. A better supportive environment in working place especially from top management and school leader are important to increase the satisfaction of the educator and reduce their stressful in the workplace. This is significant to solve the increasing of retention problem among the educator which define as worldwide issue in educational field. From the view of psychology, individual can performance well in unstressful workplace which will impact positively to the aim and objectives of the organization. Educator play a key role in educate the country next generation, therefore school management and the policy maker must ensure the emotional and personality of the educator are always in the excellent condition.

Based on the findings of the study, we aware of educator perceptions and expectations towards their satisfaction on work. In additional, policy maker understand the indicators impact on educator job stress. Further studies should be focus on a mixed method approach using focus group discussions and interviews which may add further knowledge and understanding. Other researchers who are interested in

conducting study in the same area need to emphasize on the investigation of other factors such as demographic factors, to assess their impact on the leadership behaviour, teacher stress as well as job satisfaction. The influence of various factors on each other need to be investigated to know what impact more on the leadership styles and job satisfaction in the secondary as well as in the primary school of the region.

According to the findings, proposed models reported the indicators impact on educator stress and satisfaction. These proposed models contribute the new idea to researchers about the role of principal leadership behaviour should focus in handling educator satisfaction and stress in school. Moreover to improve school administration: school principals should endeavor to adopt leadership behaviours that will create an enabling environment for teacher job satisfaction and stress to maximize academic results. In addition, improve teacher's wellness by gaining knowledge about this study.

In conclusion, the stress problem in the teaching profession needs immediate attention from society. As we know, school is an important centre for knowledge transfer, and the educator is the only agent. Children are the most important outcome of schools, therefore, without healthy educators, the schools' mission cannot not be achieved thus ultimately affecting the future development of the nation. These findings point to the need for further studies that would examine the construct of educator stress and seek to explore some of the possible intervening variables. In short, job stress is the product of the relationship between the individual and the environment (Angelica, 2015). Future research should also consider the out of school climate factors which may impact on educator job satisfaction and job stress.

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