

## A Study on Job Satisfaction as a Determinant of Job Motivation

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**Abstract:** Despite significant increase of interest in job motivation among the global organizations, the role of an administrator is still unclear. The main objective of this study is to investigate the relationship between job satisfaction (i.e., intrinsic satisfaction and extrinsic satisfaction) and job motivation. A survey method was used to collect self-report survey of employees in Malaysian Fire and Rescue Department. The SmartPLS path model analysis revealed three key findings: first, job satisfaction is significantly correlated with job motivation. Second, intrinsic satisfaction is significantly correlated with job motivation. Third, extrinsic satisfaction is significantly correlated with job motivation. These findings demonstrate that the ability of administrators to provide adequate intrinsic satisfaction and extrinsic satisfaction may lead to greater employees' job motivation. In addition, discussion, implications and conclusion are also presented.

**Keywords:** job satisfaction; intrinsic satisfaction; extrinsic satisfaction; job motivation

**JEL Classification:** M1; L3

### 1. Introduction

Job satisfaction is a crucial issue in organizational behavior (Barakat et al., 2015; Tziner et al., 2014), human resource management (Ankli & Palliam, 2012; Fabi et al., 2015; Menezes, 2012) and organizational management (Amzat & Idris, 2012; Malik, 2013). In organizations, job satisfaction is broadly viewed as employees' attitudes toward their working conditions and working environments (Fiorilla & Nappo, 2014; Joung et al., 2015; Randeree & Chaudhry, 2012) and positive emotional response to their jobs and work performance (Bigliardi et al., 2012; Chatzoudes et al., 2015; Dierendonck, 2015).

Considerable organizational behaviour literature has highlighted that high level of job satisfaction will help organizations to keep their experienced, trained and competent employees, enhance the level of motivation among employees (Arif & Ilyas, 2013; Raddaha et al., 2012; Tziner et al., 2014), create loyalty, confidence

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and commitment to the organization (Randeree & Chaudhry, 2012; Zehrer et al., 2007), increase employee productivity and decrease their absenteeism and turnover (Duxbury & Halinski, 2014), as well as improve the employees' motivation toward their job roles (Foote & Tang, 2012; Furnham et al., 2009). Thus, this situation may lead to enhanced organizational effectiveness and efficiency (Bigliardi et al., 2012; Ling & Toh, 2014).

A review of current literature relating to job satisfaction reveals that it has two major dimensions: intrinsic satisfaction and extrinsic satisfaction (Bigliardi et al., 2012; George & Zakkariya, 2015; Randeree & Chaudhry, 2012; Raddaha et al., 2012). From the perspective of organizational behaviour, intrinsic satisfaction is usually defined as an employees' satisfaction with internal job factors such as recognition, achievement, opportunity to use and develop human capacities, advancement and responsibility (Chuang et al., 2009; Raddaha., 2012). For example, if employees are satisfied with the intrinsic job factors, this may motivate them to execute their jobs effectively and efficiently. Nevertheless, if employees are not satisfied with the intrinsic job factors, this may lead to decreased job performance (Mirkamali & Thani, 2011; Nanjundeswaraswamy, 2013).

Besides that, extrinsic satisfaction is often defined as employees' satisfaction with external job factors and working environment such as compensation, interpersonal relations, supervision, company policy, safe and healthy, career growth and security, social integration and status (Chuang et al., 2009; Mirkamali & Thani, 2011; Randeree & Chaudhry, 2012). For example, if an employee is satisfied with these job elements, it may lead to increased enthusiasm. However, if the employee is not satisfied, this may lead to lower motivation and work performance (Chuang et al., 2009; Mirkamali & Thani, 2011; Nanjundeswaraswamy, 2013; Randeree & Chaudhry, 2012).

Surprisingly, studies in workplace psychology revealed that the intrinsic and extrinsic satisfaction may have a major impact on employee performance, especially job motivation (Bigliardi et al., 2005; George & Zakkariya, 2015; Seebaluck & Seegum, 2013; Stringer et al., 2011). From the perspective of organizational behaviour, job motivation consists two major components: firstly, intrinsic motivation such as achievement, recognition and the task itself; and secondly, extrinsic motivation such as organizational administration, supervision and salary (Arquero et al., 2015; Stringer et al., 2011). If employees have high intrinsic and extrinsic motivation, they will put a greater effort at accomplishing personal and organizational goals (Conrad et al., 2015; Furnham et al., 2009; Mozes et al., 2011; Organ et al., 2013; Seebaluck & Seegum, 2013).

In the model of job satisfaction, numerous scholars consider intrinsic satisfaction, extrinsic satisfaction and job motivation to be of different constructs, but very much intertwined. For instance, the ability of administrators to adequately satisfy

their employees (intrinsic and extrinsic satisfaction) may lead to a high level of job motivation (Bigliardi et al., 2005; Furnham et al., 2009; Liu et al., 2008; Seebaluck & Seegum, 2013; Stringer et al., 2011). Thus, this encourages researchers to fill in the gap by measuring the effect of administration of job satisfaction on job motivation.

## **2. Purpose of Study**

This study has three main objectives: first, to examine the relationship between job satisfaction and job motivation. Second, is to investigate the relationship between intrinsic satisfaction and job motivation. Finally, is to examine the relationship between extrinsic satisfaction and job motivation.

## **3. Literature Review**

### **3.1. Job Satisfaction and Job Motivation**

The role of job satisfaction as an important determinant is in line with the conception of needs based on the theory of motivation. For example, Maslow's (1954) hierarchy of needs theory posits that satisfaction with physiological, safety, social, esteem and self-actualization needs may positively affect employee behavior. Meanwhile, Aldefer's (1969) ERG theory explains that satisfaction with existence needs (i.e., physiological and safety needs), relatedness needs (i.e., social) and growth needs (i.e., esteem and self-actualization) may positively influence employee actions. The ideas of these theories gained strong support from the job satisfaction researchers. For example, studies have been conducted using a direct effects model to investigate the effect of job satisfaction based on different samples, such as the perception of all the knowledge workers operating in the R&D business functions from five large pharmaceutical companies in the Emilia Romagna region, Italy (Bigliardi et al., 2012), 160 students from three universities in the United States (Hurst et al., 2012) and 250 primary school teachers in Mauritius (Seebaluck & Seegum, 2013). These studies had found that satisfaction together with intrinsic and extrinsic job factors have become an important determinants of job motivation in studied organization (Bigliardi et al., 2012; Hurst et al., 2012; Seebaluck & Seegum, 2013). Thus, it is hypothesized that:

H1: There is a positive relationship between job satisfaction and job motivation

### **3.2. Intrinsic Satisfaction and Job Motivation**

McClelland's (1961) theory of needs explains that satisfaction together with the needs for achievement, power and affiliation may drive employees' satisfaction with their jobs. This idea received strong support from job satisfaction literature.

For example, the few studies that used a direct effects model to study the effects of job satisfaction based on different samples include the studies on perceptions of 267 registered nurses and nurse executive working in the private healthcare sector in Lithuania (Vilma & Egle, 2007), 14,192 respondents who participated in the labor market in the United States of America, Great Britain, West Germany, Norway, Hungary, and Israel (Westover & Taylor, 2010), and 300 construction employees in South Africa (Chileshe & Haupt, 2010). Findings from these studies showed that employees who are satisfied with the intrinsic job factors (i.e., recognition, achievement, opportunity to use and develop human capacities, advancement and responsibility) had increased their job motivation in the respective organizations (Chileshe & Haupt, 2010; Vilma & Egle, 2007; Westover & Taylor, 2010). Thus, it is hypothesized that:

H1a: There is a positive relationship between intrinsic satisfaction and job motivation.

### **3.3. Extrinsic Satisfaction and Job Motivation**

Deci's (1975) cognitive evaluation theory posits that allocating extrinsic satisfaction may affect the level of employees' motivation. This theory indicates that the tangible extrinsic rewards such as money can decrease the intrinsic motivation; whereas extrinsic rewards such as praise and appreciation may increase intrinsic motivation. This idea received strong support from job satisfaction researchers; for example, some empirical studies had used direct effects model to evaluate extrinsic satisfaction based on different samples like perceptions of 12,587 employees in United Kingdom (Sutherland, 2013), and 535 retail bank employees in Ghana (Frimpong & Wilson, 2013). These studies found that the ability of administrators to deliver extrinsic satisfaction has become a critical determinant of job motivation in the organizations (Frimpong & Wilson, 2013; Sutherland, 2013). Thus, it is hypothesized that:

H1b: There is a positive relationship between extrinsic satisfaction and job motivation.

## **4. Methodology**

### **4.1. Research Design**

This study was performed at Malaysian fire and rescue department. Data were collected using a cross-sectional research design, which allows researchers to integrate literature and the actual survey. Using this data collection technique may assist the researchers to collect precise data, minimize bias and increase in quality of collected data (Cresswell, 1998; Ismail et al., 2013; Sekaran, 2003). Initially, a survey questionnaire was drafted based on the job satisfaction literature.

Subsequently, a back translation technique was used to translate the questionnaires survey in English and Malay versions to maximize the validity and reliability of research findings (Cresswell, 1998; Ismail et al., 2013; Sekaran, 2003).

#### **4.2. Measures**

The survey questionnaire of this study consists three major parts: first, intrinsic satisfaction has 3 items adapted from job satisfaction literature (Bigliardi et al., 2012; George & Zakkariya, 2015; Raddaha et al., 2012). Second, extrinsic satisfaction has 4 items adapted from job satisfaction literature (George & Zakkariya, 2015; O'Leary et al., 2009; Raddaha et al., 2012). Third, job motivation has 5 items adapted from job motivation literature (Furnham et al., 2009; Seebaluck & Seegum, 2013; Stringer et al., 2011). All constructs were measured using a 7-item scale ranging from "strongly disagree/dissatisfied" (1) to "strongly agree/satisfied" (7). Demographic variables used as controlled variables by this study emphasized on the attitude of the employees.

#### **4.3. Sample**

This study used a convenience sampling technique to collect 100 questionnaires which can be used from different job categories and levels in the organizations and employees. Sampling technique was used because the administrator did not provide a list of registered employees; thus, the researchers were unable to adopt a random method in selecting respondents for this study. The respondents gave their consents and this survey was on a voluntary basis.

#### **4.4. Data Analysis**

The SmartPLS 2.0 was used to determine the validity and reliability of the constructs and test the research hypotheses. The main advantages of this method are: it provides latent variable scores, avoids small sample size problems, evaluates multifaceted model with many latent and manifest variables, hassle rigorous assumptions about the distribution of variables and error terms, and handles both reflective and formative measurement models (Henseler & Chin, 2010; Ismail et al., 2013; Ringle et al., 2005). The SmartPLS path model was used to measure the path coefficients for the structural model using the standardized beta ( $\beta$ ) and  $t$  statistics. The value of  $R^2$  is used as an indicator of the overall predictive strength of the model. The value of  $R^2$  is considered as follows: weak (0.19), moderate (0.33) and substantial (0.67) (Chin, 2001; Henseler & Chin, 2010; Ismail et al., 2013). As an additional assessment in accordance with the model in PLS analysis, as suggested by Geisser (1975) and (Stone, 1974) a test of predictive relevant using blindfolding ( $Q^2$  statistic) was carried out. According to Chin (2001), the  $Q^2$  statistic is a jackknife version of the  $R^2$  statistic. It represents a measure of how well observed values are reconstructed by the model and its parameter estimates. Models with  $Q^2$  greater than zero are considered to have predictive relevance. The

value of  $Q^2$  is considered as follows: small predictive relevance for an endogenous construct (0.02), medium predictive relevance for an endogenous construct (0.15), and large predictive relevance for an endogenous construct (0.35) (Hair et al., 2014).

## 5. Findings

### 5.1. Respondent characteristic

Table 1 indicates that the majority of respondents were males (84%), ages from 25 to 34 years old (51%), Malaysia Certificate of Education holders (70%), clerical and support staff (65%), working experiences from 5 to 14 years (40%), permanent staff (99%), earning monthly salaries between Malaysian Ringgit 2500 and 3999 (49%), and married employees (75%).

**Table 1. Respondent characteristic (n = 100)**

Respondent	Sub Profile	Percentage
Gender	Male	84
	Female	16
Age (years)	< 25	3
	25 – 34	51
	35 – 44	25
	45 – 54	18
	> 55	3
Education Level	LCE / SRP	3
	MCE / SPM	70
	HSC / STPM	11
	Diploma	10
	Degree	6
Position	Management & professional group	26
	Supervisory group	7
	Technical staff	1
	Clerical & support staff	65
	Other	1
Tenure of service (years)	< 5	12
	5 – 14	40
	15 – 24	26
	> 25	22
Status of service	Permanent	99
	Contract basis	1
Gross monthly salary (MYR)	< 1,000	4
	1,000 – 2,499	37
	2,500 – 3,999	49
	4,000 – 5,499	7

	5,500 – 6,999	3
Marital status	Single	25
	Married	75

Note:

LCE / SRP	:	Lower School Certificate / Sijil Rendah Pelajaran
MCE / SPM	:	Malaysia Certificate of Education / Sijil Pelajaran Malaysia
HSC / STPM	:	Higher School Certificate / Sijil Tinggi Pelajaran Malaysia

## 5.2. Validity and Reliability of Instrument

Table 2 indicates the results of convergent and discriminant validity analyses. All constructs' AVE values are larger than 0.5; thus, it shows that they had met satisfactory standard of convergent validity (Barclays et al., 1995; Fornell & Larcker, 1981; Henseler & Chin, 2010). Additionally, all constructs had the values of heterotrait-monotrait ratio less than the critical values of 0.85; this indicates that the constructs had met the validity discriminant criterion (Barclays et al., 1995; Fornell & Larcker, 1981; Henseler & Chin, 2010; Ismail et al., 2013).

The validity and reliability of all constructs are presented by Table 3. The correlation between items and factors have higher loadings than items of the different constructs, and the loadings of variables are larger than 0.70 in their own constructs in the model; and these are considered acceptable (Henseler & Chin, 2010). Furthermore, the values of composite reliability for all constructs are greater than 0.80, indicating that the instrument used in this study has high internal consistency (Henseler & Chin, 2010; Nunally & Bernstein, 1994).

**Table 2. The Results of Convergent and Discriminant Validity Analyses**

Construct	AVE	Intrinsic Satisfaction	Extrinsic Satisfaction	Job Motivation
Intrinsic Satisfaction	0.613	<b>0.783</b>		
Extrinsic Satisfaction	0.519	0.650	<b>0.774</b>	
Organizational Commitment	0.592	0.533	0.598	<b>0.769</b>

**Table 3. The Results of Factor Loadings and Cross Loadings for Different Constructs, and Composite Reliability**

Constructs	Cross Factor Loading			Composite Reliability
	1	2	3	
Intrinsic Satisfaction 1) The amount of responsibility you are given. 2) The attention paid to suggestions you make. 3) The variety in your job.	0.800  0.730  0.815			0.826
Extrinsic Satisfaction 1) The physical working condition. 2) The recognition you get for good work. 3) The way your organization is managed. 4) Your job security.		0.797 0.717 0.819 0.797		0.852
Job Motivation 1) The physical working condition. 2) I enjoy discussing about my organization with people outside of it. 3) It would be very hard for me to leave my organization right now, even if I wanted to. 4) Right now, staying with my organization is a matter of necessity as much as desire. 5) My organization deserves my loyalty because of its treatment towards me.			0.829 0.754 0.786 0.749 0.761	0.883



**5.3. Analysis of the Constructs**

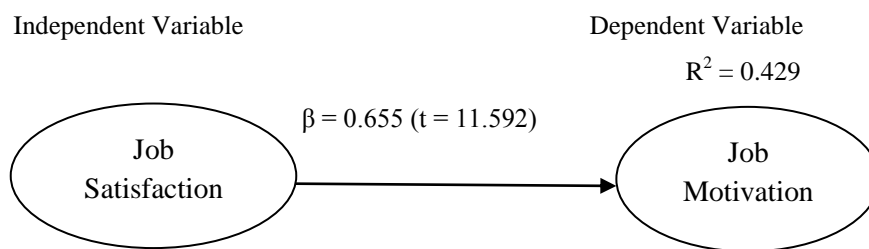
Table 4 shows the results of Collinearity and Descriptive Statistics. The value of means for all constructs are from 4.15 to 5.11, signifying that majority of the respondents perceived that the levels of intrinsic satisfaction, extrinsic satisfaction and job motivation ranged from high (4) to highest level (7) in the organizations. Whereas, the values of variance inflation factor for the correlation between the independent variable (i.e., intrinsic satisfaction and extrinsic satisfaction) and the dependent variable (i.e., job motivation) are less than 5.0, indicating that the data are not affected by serious collinearity problem (Hair et al., 2014). These results verify that the instrument employed in this study met the satisfactory standards of validity and reliability analysis.

**Table 4. The Results of Collinearity and Descriptive Statistics**

Construct	Mean	Standard Deviation	Variance Inflation Factor
Intrinsic Satisfaction	5.10	.58	1.746
Extrinsic Satisfaction	4.15	.46	1.746
Organizational Commitment	5.11	.64	

**5.4. Outcomes of Testing Hypotheses 1**

Figure 1 shows the results of the direct effect model using the SmartPLS path model. The value of R<sup>2</sup> was used to measure the strength of the overall predictive. The value of R<sup>2</sup> is considered as follows: weak (0.19), moderate (0.33), and substantial (0.67) (Chin, 2001; Henseler & Chin, 2010; Ismail et al., 2013). This model shows that the presence of job satisfaction in the analysis had described 42.9 percent of the variance in the dependent variable. Precisely, the results of testing the research hypothesis showed that job satisfaction is significantly correlated with job motivation ( $\beta = 0.655$ ;  $t = 11.592$ ), thus H1 is supported. Therefore, the result proves that job satisfaction is as an important determinant of job motivation.



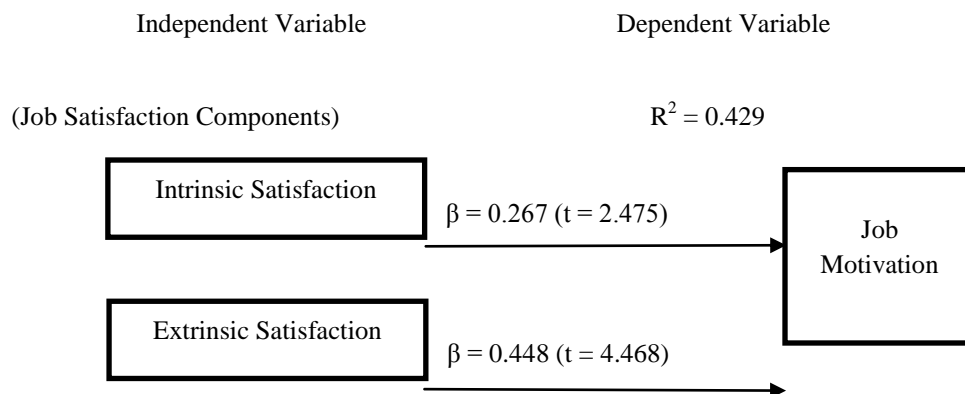
Note: Significant at \* $t > 1.96$

**Figure 1. The Outcome of testing Hypothesis 1**

As an extension, a test of predictive relevance for the reflective endogenous latent variable was further conducted based on Stone-Geisser’s formula:  $q^2 = Q^2_{included} - Q^2_{excluded} / 1 - Q^2_{included} = 0.245$ , signifying that it was larger than zero for the reflective endogenous latent variable. Thus, it has predictive relevance.

**5.5. Outcomes of Testing Hypotheses 1a and 1b**

Figure 2 shows the results of testing a direct effect model using the SmartPLS path model. The value of  $R^2$  was used as an indicator to the overall predictive strength of the model. The value of  $R^2$  is deliberated as follows: 0.19 (weak), 0.33 (moderate), and 0.67 (substantial) (Chin, 2001; Henseler & Chin, 2010). This model indicates that the inclusion of intrinsic satisfaction and extrinsic satisfaction in the analysis had explained 42.9 percent of the variance in the dependent variable. Specifically, the results of testing the research hypothesis presented two major findings: first, intrinsic satisfaction is significantly correlated with job motivation ( $\beta = 0.267$ ;  $t = 2.475$ ), thus H1a is supported. Second, extrinsic satisfaction is significantly correlated with job motivation ( $\beta = 0.448$ ;  $t = 4.468$ ), thus H1b is supported. As such, the results confirmed that intrinsic satisfaction and extrinsic satisfaction as significant determinants of job motivation.



*Note: Significant at \*t > 1.96*

**Figure 2. The Outcome of testing Hypothesis 1a and 1b**

In addition, a test of predictive relevance for the reflective endogenous latent variable was further conducted based on Stone-Geisser’s formula:  $q^2 = Q^2_{included} - Q^2_{excluded} / 1 - Q^2_{included} = 0.243$ , indicating that it is greater than zero for the reflective endogenous latent variable. This shows that it has predictive relevance.

## 6. Discussion and Implications

The results of this study confirmed that job satisfaction is a significant determinant of job motivation in the studied organizations. In this study, administrator of organization focused on issues relating to employees' job satisfaction. Majority of respondents felt that the levels of intrinsic satisfaction, extrinsic satisfaction and job motivation are high. This situation posits that the ability of administrators to provide sufficient intrinsic satisfaction and extrinsic satisfaction may lead to greater employees' job motivation.

This study provides three major implications: contribution to theory, research methodology, and practical contribution. In respect of contribution to the theory, these findings have provided great potential in understanding the intrinsic satisfaction and extrinsic satisfaction in strengthening employees' motivation. The results also support the findings by Bigliardi et al. (2005), Seebaluck & Seegum (2013) and Stringer et al. (2011). In regard to the validity of the methodology of the study, a questionnaire survey employed by this study has met the standards of validity and reliability analysis. This situation may lead to precise and reliable research findings.

In regard to practical contributions, these findings can be used as guidelines by practitioners to improve the effectiveness of the administration of employees' job satisfactions. This objective may be realized if the management pays attention to the important aspects as follows: first, the factors influencing an employee's job satisfaction should identify with the current situation and employees' expectations. Enhancement in this aspect may help the employee to acquire prodigious satisfaction in their jobs and motivate them to continuously support the organizations' agendas. Second, training content and methods should be improved by concentrating on the strengthening of administrators' creativity and problem solving skills. These skills may encourage administrators to use their intellectuals in executing daily job, prioritizing employees' needs, improving employees' potentials, learning new problem-solving strategies and sharing the organization's interests with employees. Consequently, it may enhance the capacity of administrators in satisfying the employees' needs. Finally, job satisfaction should be used as an important tool to develop employees' potentials and talents. For instance, administrators need to identify employees' needs, provide sufficient support at enhancing employee's capabilities, and suggest alternative ways to improve employees' wellbeing in the workplace. If these suggestions are greatly considered, it may motivate employees to improve their efficiency and effectiveness in achieving organizational goals.

## 7. Conclusion

This study shows that the ability of administrators to provide sufficient intrinsic satisfaction and extrinsic satisfaction will motivate employees to strengthen employees' commitments towards the organizations studied. These findings also supported job satisfaction research literature, mostly published overseas. Thus, current research and practice in job satisfaction model should consider the intrinsic satisfaction and extrinsic satisfaction as the primary driving forces in the domain of job satisfaction. This study also showed that the ability of administrators to satisfy employees' job satisfaction may lead to positive results (e.g., productivity, performance and commitment). Additionally, these positive outcomes may support organizational competitiveness in the global economy era.

The findings of this study are subjected to some limitations. First, the sample of this study is limited to employees of Malaysia Fire and Rescue Department. Thus, the generalization of these findings to other organizations is very restricted. Second, this study utilizes cross-sectional research design to collect data at one point of time within one period study. Thus, this study may not capture causal relations between variables. Third, this study uses a direct effect model to show the relationship between the independent variables and the dependent variable without examining the effects of moderate or mediating variable. The findings may differ if mediating or moderating variables are adopted. Fourth, this study employs a small number of samples and is exposed to the bias issues. If these limitations are strongly considered, it may provide a better finding for future research.

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