

Which One Contribute More on Work Performance: Education Background or Work Motivation?

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Abstract: This study argues that work motivation plays more vital role in influencing workers' work performance than their previous education background at the vocational schools. Thus, the main purpose of this study was to determine the amount of contribution of work motivation and previous vocational education background on work performance among the Vocational High School (VHS) graduates who worked in private sectors in West Sumatra, Indonesia. The design of this study was a survey method which used a set of questionnaire to collect data. There were 302 respondents who were randomly selected. The findings indicated that the level of work motivation and work performance among VHS graduates working in the private sectors in West Sumatra, Indonesia was very good as well as positive and significant relationship between both variables. On the other hand, there is no significant difference between the two variables in terms of age and duration of services. In detailed, dimensions of work motivation such as organizational climate, job training and incentive showed a highly positive and significant relationships with work performance rather than the VHS graduates' education background. The implication is work place environment needs be given serious attention by the private sectors' employers for workers to be motivated to perform their work with excellence. It also indicates that graduate's school education background is only important at the job entry level and performing basic job task requirements.

Key words: Vocational high school, work motivation, work performance, organizational climate, job training, incentives and education background

INTRODUCTION

The problems of unemployment among the Vocational High School (VHS) graduates in Indonesia has never stopped been debated among all parties involved in education development. The focus of the debate has always been on the quality of the graduates rather than on the economy's ability to absorb them. Simply, it means that quality graduates will definitely get jobs or be employed by the employers. So, if the graduates did not get jobs the current belief is the graduates are not of good quality potential workers. Based on this belief, many studies relating to the unemployment problem among the VHS graduates in Indonesia had been done on evaluation of the curriculum. Some of the recurring findings are blames that there were lack of facilities and lack of qualified teachers which contributed to the low quality graduates of the VHS. Joko further add to the blames that the vocational high schools in Indonesia on the average are still not well prepared to produce good quality graduates. On the other hand, studies conducted among the employers agreed with the blames by saying that they

were not satisfied with the quality of the VHS graduates. Whereas, Oketch (2007) pointed out there has always been a mismatched between what the industries expected from the VHS graduates and what the schools prepared them. Aljufri said that the quality of the vocational and technical high schools in Indonesia since the 1990s has been declined in terms of having quality teachers and programs in preparing their students for jobs in the market.

In a study conducted by Yusof Syakir on the work performance of the VHS graduates working at one of the Government-Led Company (GLC) named National Electric Company found that their work quality was not of satisfactory to the society. About >70% of the workers working in this huge Government-Led Company are the graduates of the Upper Level High Schools (ULHS) and only 6% having undergraduate degree. In Sumatera Barat alone 82.3% of the workers of the same company were graduates of the upper level high schools and 6.7% having undergraduate and diploma degree. From this 82.3% of the workers, 81% were graduates of the vocational and technical high schools. According to

Muchtar, the same situation occurring in several other GLCs and private companies that is the majority of workers were usually from the vocational and technical high schools. This shows that it is important to confirm this situation again by the level of work performance of these graduates at their work place and what factors might influence its level other than their school education background.

Work motivation and work performance: Hunsaker (2001) pointed out that work performance is the result of the combination between ability and motivation. He further refers ability to the combination between attitude towards work and an individual competence. According to Pinder (1998), work motivation is a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behavior and to determine its form, direction, intensity and duration.

Motivation plays the role of an implicit or explicit drive that pushes an individual to do something (Bernard, 1965; Bainbridge, 2010; Donohue and Wong, 1997; Duke and Nowicki, 1974; Helmreich and Spence, 1978; Kleinginna and Kleinginna, 1981). At work place, Bainbridge (2010) agreed that implicit motivation plays more sustaining role in driving a worker to perform their best. As compared to the explicit motivation such as employers' appreciation and support, the drives tend to be weaker and fade faster. Hadari and Nawawi provides some of the dimensions of the work motivation such as organizational climate, job trainings and incentives.

Hoy and Miskel (2000) states that organizational climate has to do with the level of motivation of individuals working in an organization and their work performance. Organizational climate act as a bond which binds together the working members in an organization. Within this organizational climate, there is a system of same beliefs and values which guide the members to act in the direction of an organization's goals. Therefore, the perceptions of the general organizational climate develop as individuals attribute meaning to their organizational context based on the significance of the environment for individual values (James *et al.*, 1990). On the other hand, Schein (2004) refers organizational climate as observed behavioral regularities when people interact such as the language they use, the customs and traditions that evolve and the rituals they employ in a wide variety of situations. Robbins (1998) stresses that organizational climate consists of ten principles such as:

- Individuals' initiatives in an organization
- Tolerance towards other members' behaviors
- Organizational goals

- Integration
- Management support
- Monitoring organization's development
- Organization's identity
- Feedback system for the organization's members
- Respect others' differences
- Communication model

Good organizational climate will motivate an organization's workers to work hard and give their full commitments (Kreitner and Kinicki, 2007).

Much has been said on the relationships between on-the-job training and work motivation among employees. Most employers provided workforce training to provide workers with skills required in their current jobs and to develop their business performance. According to Watson (1994), business has come to realize that a motivated and satisfied workforce can deliver powerfully to the bottom line. Since, employee performance is a joint function of ability and motivation, one of management's primary tasks, therefore is to motivate employees to perform to the best of their ability by providing job training in organization (Moorhead and Griffin, 1998).

Hadari and Nawawi stated that incentive refers to appreciation and token that are given to individuals to motivate them to achieve high productivity. The major findings of the study by Jain *et al.* (2007) mentioned that the attitude, feeling and emotions of the employee towards incentives in the organization play a vital role in determining their performance and behaviors. Besides that according to Ballentine *et al.* (2003), explain that both monetary and non-monetary incentives are considered as workplace motivators.

In summary, work motivation factors would play continuous effective roles at work place in boosting workers' work performance. This means that companies do not have to rely on the workers' previous education background only but keep providing conducive work environment in order to ensure productive work performance.

Education background and work performance: According to Benson *et al.* (2004), most organizations used education achievement as a person's skill or productivity level during job entry. They usually used it as a prerequisite in hiring decisions. However over the past 2 decades, there has been very little research directly examining the relationship between education level and job performance at workplace. This is particularly surprising given that educational opportunities had increased substantially (Trusty and Niles, 2004) while many organizations had raised the educational

qualifications for their job entry (Kroch and Sjoblom, 1994). On the other hand, the conceptualization of job performance had expanded considerably to include not only productivity but also cognitive task and citizenship behaviours (Welbourne *et al.*, 1998). According to Ng and Feldman (2009), many organizations saw that educated workers contribute only marginally to organizational effectiveness than less educated workers do. This is because many organizations funded higher or further education for their employees but did not rigorously assess the short term returns in terms of improved work performance. They also found that education level only influence score task performance which are usually basic cognitive activities. They conclude that education background influence more indirectly rather than directly to employees working performance in terms of jobs satisfaction. Lepak and Snell (1999) pointed out that individuals' educational attainments are not applied in companies jobs but also in other settings such as community related activities. In other words, it is difficult to see the direct impact of education on work performance.

On the other hand, the higher the education level the more it will contribute to work performance which have been found specific to mostly cognitive tasks at workplace. According to McCall and Kaplan (1985) employees are assumed to be information workers who used education mainly for communication and solving issues and problems arisen. The experience and knowledge that employees have gained from the present or previous working context plays an important role on how they perceive job satisfaction. However, a number of studies have indicated a slight negative relationship to job satisfaction. This may be related to better-educated people having higher expectations of their jobs and believing that their work should provide greater fulfillment and responsibility and unfortunately which most jobs do not (Fried and Ferris, 1987; Hunt, 1996; Organ, 1988; Bennett and Robinson, 2000; Rotundo, 2002; Cascio, 1987; Vernon, 1960).

Conceptual framework: The conceptual framework for this study is based on Hunsaker (2001) and Hoy and Miskel (2005)'s models relating to work performance. Hunsaker (2001) states that performance is a combination of the ability to motivate whereas affordability is a combination of attitudes toward different types of human resources training while motivation is a combination drive with commitment. Hoy and Miskel (2000) states that the organization climate related to motivated individual's behavior and groups as well as related to individual

performance and employee. Hadari and Nawawi suggested that incentives are appreciation or rewards given to motivate employees to high productivity which are fixed. These concepts are shown in the following model in Fig. 1.

Purpose: The purpose of this study was to determine whether there is a relationship between work motivation and level of work performance among the graduates of vocational high schools who worked in the private sectors industries in Sumatera Barat, Indonesia. In addition, other variables that might be the mediators such as organizational climate, on-the-job training and incentives that might influence the level of work motivation were also investigated. Specifically, the objectives of this study are:

- To identify the level of work performance among the vocational high school graduates working in the private sector industries
- To identify the level of work motivation among the vocational high school graduates working in the private sector industries
- To identify the correlation between level of work motivation and work performance among the vocational high school graduates working in the private sector industries
- To determine the level of influence of organizational climate, on-the-job training and incentives on the level of work motivation among the vocational high school graduates working in the private sector industries
- To determine whether there is a significance difference of the level of work motivation and work performance based on age and duration of services among the vocational high school graduates working in the private sector industries

MATERIALS AND METHODS

The design of this study was a survey method which used a set of questionnaire to collect the data. This design was used because of the number of samples that was large and the nature of the data collected. The population of this study was 2,172 workers who were working in the 13 private companies in Sumatera Barat, Indonesia. These workers were also graduates of the vocational high schools. The number of representative samples selected for this study was based on the views of Krejcie and Morgan in Wiersma (2000) and Neuman (2000). Thus, 302 respondents were selected

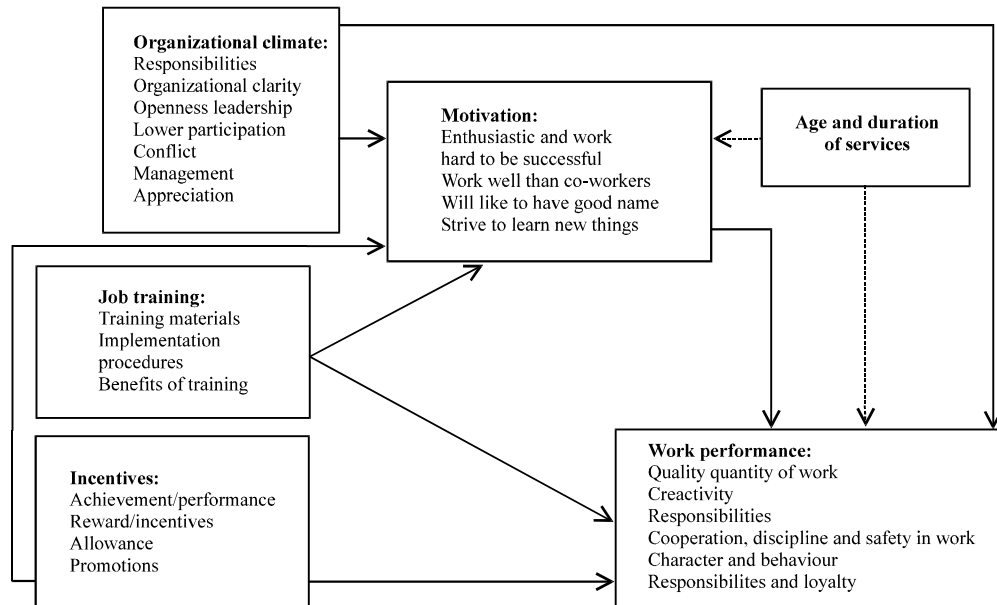


Fig. 1: The relationship between the variables (organizational climate, motivation, job training, incentives and performance) is built on the concept of organizational climate, motivation, job performance by Hoy and Miskel (2000) and Tagiuri (1996), job training by Ismail *et al.* (2010) and incentives by Hadari and Nawawi

Table 1: The list of companies, its population and sample selected

Companies	Population	Sample
PT. Semen Padang	450	26
PT. Perusahaan Listrik Negara	190	23
PT. KeretaApi Indonesia	137	24
PT. Pos Indonesia	129	20
PT. Telekom Indonesia	163	23
PT. CendrawasihMuloano	150	24
PT. LembahKaret	253	30
PT. Incasi Raya	76	21
PT. SumberKembangAgung	115	20
PT. BatangHariBarisan	125	21
PT. TuahAlamNegeri	74	23
PT. MulyaLanggeng	130	25
PT. Famili Raya	180	22
Total	2,172	302

using the simple random sampling method. Table 1 shows the list of companies and the corresponding total number of population of workers and the number of samples taken from each.

The questionnaire used consisted of five different sections which measured the variables such as organizational climate, work motivation, on-the-job training, incentives and work performance. The organizational climate section consisted of 29 items which were based on Hoy and Miskel (2000) and Kolb *et al.* (1979). The work motivation section consisted of 18 items which were based on Mitzel *et al.* (1982) and Hunsaker (2001). The on-the-job training section consisted of 18 items which were based on Rozhan and Ariffin. The incentive section consisted of 16 items which were based

on Hadari and Nawawi. The work performance section consisted of 40 items which were based on Hunsaker (2001). Each section were measured using 4-Likert scale on the continuum of agree to disagree. However, work performance section was given to the employers to fill in instead of the workers themselves.

RESULTS

Profile of employees: Table 2 shows the profile of respondents or employees involved in this study. Employees' profile is reported based on age, education, length of service with the company and the type of company where they worked. Altogether, there were 302 employees from either government led or individual owned private companies in West Sumatera, Indonesia. Table 2 shows that 155 employees (53.3%) aged between 18-25 years, 94 employees (31.1%) aged between 26-32 years and 53 employees (17.5%) aged between 33-40 years. With reference to their educational background, 188 employees (62.3%) were from VHS technology, 17 employees (5.6%) were from VHS tourism, 42 employees (13.9%) were from VHS business, 15 (5.0%) were from VHS farming/gardening, 20 employees (6.6%) were from VHS maritime and 20 employees (6.6%) were from VHS health. In terms of the length of services, 88 employees (29.1%) had served <5 years, 124 employees

Table 2: Profile of employees

Respondents	Frequency	Percentage
Age (years)		
18-25	155	51.30
26-32	94	31.10
33-40	53	17.50
Education		
VHS technology	188	62.30
VHS tourism	17	5.60
VHS business	42	13.90
VHS agriculture/gardening	15	5.00
VHS marine	20	6.60
VHS health	20	6.60
Duration of services (years)		
<5	88	29.10
5-10	124	41.10
11-15	77	25.50
≥16	13	4.30
Types of companies		
PT. Semen Padang	31	20.26
PT. Perusahaan Listrik Negara (PLN)	25	8.27
PT. Kereta Api Indonesia (PJKA)	24	7.95
PT. Pos Indonesia	23	7.62
PT. Telekom Indonesia	23	7.62
PT. Cendrawasih Muloano	23	7.62
PT. Lembah Karet	25	8.27
PT. Incasi Raya	21	6.95
PT. Sumber Kembang Agung	22	7.28
PT. Batang Hari Barisan	21	6.95
PT. Tuah Alam Negeri	20	6.62
PT. Mulya Langgeng	23	7.62
PT. Famili Raya	21	6.95
Total	302	100.00

(41.1%) had worked between 5-10 years, 77 employees (25.5%) had worked between 11-15 years and 13 employees (4.3%) had worked >16 years.

From the 13 companies, 20 employees (6.6%) worked in the electric company, 40 employees (13.2%) worked in the cement company, 30 employees (9.9%) worked in the telecom company, 10 employees (3.3%) worked in the Angkasa Pura, 20 employees (6.6%) worked in the Port Marine, 15 employees (5.0%) worked in the agriculture /gardening, 35 (11.6%) worked in the water supply company, 30 employees (9.9%) worked in the rubber factory, 30 employees (9.9%) worked in a plywood company, 35 employees (11.6%) worked in textile company, 20 employees (6.6%) working as nurses and finally, 17 employees (5.6%) worked in the hotel sector.

Work performance level and work motivation level among VHS graduates who work at the private companies: Table 3 presents the results of the respondents' level of performance in terms of quality and quantity. In terms of work performance level, the data shows 257 employees (85.1%) scored very good (Mean ≥29.25-35.00), 42 employees (13.9%) scored good (Mean = 23.00-26.00) and only 3 employees (1.0%) scored poor (Mean ≤15.75 to <23.00) by their corresponding

Table 3: Level of work performance and work motivation among the Employees (VHS graduates) in private companies

Interpretations	Mean	Frequency	Percentage
Level of performance			
Very good	≥29.25-35.00	257	85.1
Good	23.00-26.00	42	13.9
Poor	≤15.75-<23.0	3	1.0
Total		302	100.0
Work motivation level			
Very good	≥58.50-68.00	134	44.4
Good	45.00-58.50	168	55.6
Total		302	100.0

Table 4: Correlation between work motivation and work performance among the employees (VHS graduates) in private companies

Relationship between variables	N	r	r ²	Sig.
Work motivation-work performance	302	0.543	0.294	0.000

Sig. at the level of 0.01 (2-tailed); Alpha value = p<0.01

employers. The findings suggest that generally the employees who were then VHS graduates had performed excellently at their workplace. Initially, this result may suggest that these employees had received good quality VHS education. According to Calhoun and Finch (1982), Davenport (2005), Lubit (2001), Nahapiet and Ghoshal (1998), Nissen (2005) and Teece (1998) states that a person is considered professional when he or she is able to perform tasks quickly, accurately and efficiently. Furthermore, they said these qualities have to do with a worker's professional knowledge about the work that he or she has to perform.

On the other hand, the work motivation level of the employees shows that 134 (44.4%) of them scored very good (Mean ≥58.50-68.00) while 168 (55.6%) scored just good level (Mean = 45.00-58.5). Generally, this finding suggests that the employees' work motivation (who was the VHS graduates) were almost very good. This finding is in line with the opinions of Campbell and Pritchard (1976) and Walker (1980) stated that employees who are highly motivated in a company will show positive experience in their occupation.

Relationship between work motivation and work performance among the employees (VHS graduates) in private companies: Table 4 shows the correlation between work motivation and work performance of the employees who work in the private companies. The Pearson correlation product moment statistical tool was carried out to show that the value of $r = 0.543$, $r^2 = 0.294$ and $p < 0.01$. These values show that there is a quite a strong positive correlation between work motivation and work performance. The p-values which is < 0.01 shows that the relationship between the two variables is significant (Pallant, 2004; Jackson, 2005).

The positive and significant correlation between the two variables shows that work motivation plays an important role in determining work performance among the

employees. This finding was in parallel with As'ad, Harrington (2003), McClelland (1988) and Vroom (1964)'s studies which showed that increase in job motivation will increase the employees' work performance. In short, they proposed that for organizations to achieve high work performance from its employees, they should provide a conducive work environment that encourages high motivation to work hard.

Relationship between organizational climate and work performance among employees of private companies:

Table 5 shows the correlation between organizational climate and work performance of the employees in the private companies. Based on the Pearson correlation product moment statistical tool, the value obtained was $r = 0.570$, $r^2 = 0.32$ and $p < 0.01$. Both the values of r and r^2 shows that the correlation between the two variables studied was positive moderate. However, it is a significant correlation based on the alpha value which is $p < 0.01$ (Pallant, 2004; Jackson, 2005).

The findings were in agreement with the views of Newstrom and Davis (2006), Suliman and Abdullah (2005) and Kangis *et al.* (2000) who pointed out that if the conducive organizational climate will induce staffs to give their strong commitment to the success of the organization's goals.

Correlation between incentives and work performance among employees (VHS graduates) in private companies:

Table 6 shows the results of the Pearson product moment correlation analysis between incentives received and work performance of the employees who were then vocational high school graduates worked in the private companies. The results was $r = 0.570$, $r^2 = 0.32$ and $p < 0.01$. This shows that the correlation between incentives and work performance was just positively moderate. However, similar to the organizational climate dimension, the value of $p < 0.01$ shows that the correlation is a significant correlation (Pallant, 2004; Jackson, 2005).

The significantly positive correlation between incentives and work performance result in this study demonstrates the importance of incentives at workplace for improving work performance among the employees who were then VHS graduates. Keenan (1996),

Table 5: Correlation between organizational climate and work performance among the employees (VHS graduates) in private companies

Relationship between variables	N	r	r ²	Sig.
Organizational climate-work performance	302	0.570	0.32	0.000

Table 6: Correlation between incentives and work performance among the employees (VHS graduates) in private companies

Relationship between variables	N	r	r ²	Sig.
Incentives-work performance	302	0.570	0.32	0.000

Sig. at the level of 0.01 (2-tailed); alpha value = $p < 0.01$

Eisenberger and Cameron (1998) and Eisenberger *et al.* (1999) stressed the need for providing incentives to workers by employers in any organization because it will certainly influence their working performance. This incentive plays as one of the motivating agents.

Relationship between job training and work performance among employees (VHS graduates) in private companies:

Table 7 shows the results of Pearson correlation product moment analysis on the correlation between job training and work performance of the employees working in the private companies in West Sumatera. The result is $r = 0.414$, $r^2 = 0.171$ and $p < 0.01$ which depicted that is a moderately positive correlation between job training and work performance among VHS graduates working in private companies in West Sumatera. However, it is a significant correlation as proven by the value of $p < 0.01$ between the two variables (Pallant, 2004; Jackson, 2005). The moderately positive and significant correlation between the two variables signifies that job training received by employees plays an important role in influencing the value of work performance of the employees. With reference to the study of Haywood (1992), he stated that trainings provided by a company to their employees will positively motivate them to work hard and thus improving their work performance. Haywood (1992)'s view is reaffirmed by Carey (1995) who agree with the importance of job training received will encourage employees to give high commitments on their tasks at any workplace.

The influence of organizational climate, job training, incentives received and education background on work performance of the employees (VHS graduates) in private companies:

Table 8 shows the results of regression test on the influence of four variables such as organizational

Table 7: Correlation between job training and work performance among employees (VHS graduates) in private companies

Correlation between variables	N	r	r ²	Sig.
Job training-work performance	302	0.414	0.171	0.000

Sig. at the level of 0.01 (2-tailed); alpha value = $p < 0.01$

Table 8: Regression analysis for organizational climate, job training, incentives received and education background on work performance of the employees (VHS graduates) in private companies

Predictors	B	SE	β	t	Sig.	r	r ²	Sum of squares
Organizational climate	0.434	0.063	0.339	6.942	0.000	0.57	0.323	32.3
Incentives	0.470	0.090	0.264	5.199	0.000	0.66	0.431	10.8
Job training	0.413	0.100	0.197	4.111	0.000	0.68	0.463	3.2
Education background	0.207	0.084	0.118	2.468	0.014	0.69	0.472	0.9
Constant	19.790	6.22		3.18	0.002			

Dependent variable: Work performance by VHS graduates; Predictors: (Constants), organizational climate, incentives, job training, education background

Table 9: One-way ANOVA level of work motivation among the employees (VHS graduates) based on age and duration of services

Variables	Sum square	df	Mean ²	F	Sig.
Age					
Between group	14.301	1	14.301	0.758	0.385
Within group	5660.136	300	18.867		
Total	5674.437	301			
Duration of services					
Between group	123.488	2	61.744	3.326	0.037
Within group	5550.949	299	18.565		
Total	5674.437	301			

Sig. level = 0.01

climate, job training received, incentives received and motivation on work performance among VHS graduates working in the private companies of West Sumatera. The results are: Organizational climate ($\beta = 0.339$, $t = 6.942$, $p = 0.000$, $r = 0.57$ and $r^2 = 0.323$), education background ($\beta = 0.118$, $t = 2.468$, $p = 0.014$, $r = 0.69$ and $r^2 = 0.472$), job training ($\beta = 0.197$, $t = 4.111$, $p = 0.000$, $r = 0.68$ and $r^2 = 0.463$) and incentives ($\beta = 0.264$, $t = 5.199$, $p = 0.000$, $r = 0.66$ and $r^2 = 0.431$).

The findings show that the organizational climate scored the highest in terms of the portion of influences (32.3% of the total) on work performance. This followed by incentives received (10.8%), job training (3.2%) and lastly education background influences on 0.9% of the total variance. The results show that education background variable is the least that influence work performance among the VHS graduates working in private companies of West Sumatera.

Based on the β scores, when the organizational climate variable score increased per unit, work performance will increase by 0.339 units, when the incentives variable score increased per unit, work performance will increased by 0.264 units, when the job training variable score increased per unit, work performance will increased by 0.197 units. Finally, when the education background variable score increased per unit, work performance will increased by 0.118 units.

Levels of work motivation among the employees (VHS graduates) in private companies based on age and duration of services: Table 9 shows the results of one-way ANOVA test to find out whether there is a significant difference in work motivation among the employees based on age and duration of services. From the analysis, the values obtained are $F(1,14) = 0.758$, $p = 0.385 > 0.01$ and $F(2,61) = 3.326$, $p = 0.037 > 0.01$. This value indicates that there is no significant difference in terms of work motivation based on age and duration of services.

DISCUSSION

This study argues that work motivation plays more vital role in influencing workers' work performance rather than their previous education background at the

vocational schools. The same finding has been demonstrated by Herzberg (1966) through his two-factor theory which demonstrates that worker's motivation originates from the job itself not from other external characteristics. This motivation leads to job satisfaction and have a direct positive effect on the work performance such as improved productivity. On the other hand, Hackman and Oldham (1980) introduced their Task Enrichment Theory which identifies five task characteristics, such as skills variety, task identity, task importance, autonomy and performance feedback which are related to motivation level of an employee's which then helps to improve his or her working performance in an organization. In terms of education levels, Ng and Feldman (2009) emphasized that it influence certain core cognitive work tasks only and job satisfaction which only indirectly influence work performance. According to social cognitive theories such as job satisfaction theory, some employees perform better than others because they have different cognitions, competencies and job performance goals (Locke and Latham, 1990). Therefore, employee's knowledge or education background is more relevant for determining a job position and basic competencies requirements.

CONCLUSION

From the results, this study argues that employee's cognitions (education background) influence work performance more indirectly as compared to work motivations' elements such as organization climate, incentives and job trainings on work performance.

REFERENCES

- Bainbridge, C., 2010. Intrinsic motivation. About. com, The New York Times Company. <http://giftedkids.about.com/od/glossary/g/intrinsic.htm>.
- Ballentine, A., N. McKenzie, A. Wysocki and K. Kapner, 2003. The role of monetary and non-monetary incentives in workplace as influenced by career stage. Publication of Department of Food and Resources Economics, Institute of Food and Agricultural Sciences, University of Florida. <http://edis.ifas.ufl.edu/hr016>.
- Bennett, R.J. and S.L. Robinson, 2000. Development of a measure of workplace deviance. J. Applied Phys., 85: 349-360.
- Benson, G.S., D. Finegold and S.A. Mohrman, 2004. You paid for the skills, now keep them: Tuition reimbursement and voluntary turnover. Acad. Manage. J., 47: 315-331.

- Bernard, H.W., 1965. *Psychology of Learning*. McGraw-Hill Co., New York.
- Calhoun, C.C. and A.V. Finch, 1982. *Vocational Education: Concept and Operations*. 2nd Edn., Wadsworth Publishing Co., California, ISBN: 13-9780534009960, Pages: 352.
- Campbell, J.P. and R.D. Pritchard, 1976. *Motivation Theory in Industrial and Organizational Psychology*. In: *Handbook of Industrial and Organizational Psychology*, Dunnette, M.D. (Ed.). Rand McNally Publisher, Chicago, USA., pp: 63-130.
- Carey, R., 1995. Five top corporate training programs and how your company can have one too. *Successful Meetings*, 44: 56-62.
- Cascio, W., 1987. *Applied Psychology in Personnel Management*. 3rd Edn., Reston Publishing, Reston, VA.
- Davenport, T.H., 2005. *Thinking for a Living: How to Get Better Performance and Results from Knowledge Workers*. Harvard Business School Press, Boston, ISBN-13: 978-1591394235, Pages: 240.
- Donohue, T.L. and E.H. Wong, 1997. Achievement motivation and college satisfaction in traditional and nontraditional students. *Education*, 118: 237-243.
- Duke, M.P. and S. Nowicki, 1974. Locus of control and achievement: The confirmation of a theoretical expectation. *J. Psychol.*, 87: 263-267.
- Eisenberger, R. and J. Cameron, 1998. Reward, intrinsic interest and creativity: New findings. *Am. Psychol.*, 53: 676-679.
- Eisenberger, R., L. Rhoades and J. Cameron, 1999. Does pay for performance increase or decrease perceived self-determination and intrinsic motivation? *J. Personality Social Psychol.*, 77: 1026-1040.
- Fried, Y. and G.R. Ferris, 1987. The validity of the job characteristics model: A review and meta analysis. *Personnel Psychol.*, 40: 287-322.
- Hackman, J.R. and G.R. Oldham, 1980. *Work Redesign*. Addison-Wesley Publishing Co., USA.
- Harrington, J., 2003. Training adds up. *Incentive*, 177: 22-22.
- Haywood, K.M., 1992. *Effective training: Toward a strategic approach*. Cornell Hotel Restaur. Administrat. Quarter., 33: 43-52.
- Helmreich, R.L. and J.T. Spence, 1978. *Work and Family Orientation Questionnaire: An Objective Instrument to Assess Components of Achievement Motivation and Attitudes Toward Family and Career*. Journal Supplement Abstract Service, American Psychological Association, USA.
- Herzberg, F., 1966. *Work and the Nature of Man*. The World Publishing Co., Cleveland.
- Hoy, W.K. and C.G. Miskel, 2000. *Educational Administration: Theory, Research and Practice*. 6th Edn., McGraw Hill, Boston, Pages: 512.
- Hoy, W.K. and C.G. Miskel, 2005. *Educational administration theory, research and practice*. Random House, New York.
- Hunsaker, P., 2001. *Training in Management Skill*. Prentice Hall, Upper Saddle River, New Jersey.
- Hunt, S.T., 1996. Generic work behavior: An investigation into the dimensions of entrylevel. *Personnel Psychol.*, 49: 51-83.
- Ismail, I., R.M. Idrus and T. Gunasegaran, 2010. Motivation, psychology and language effect on mobile learning in Universiti Sains Malaysia. *Int. J. Interact. Mobile Technol.*, 4: 31-36.
- Jackson, F., 2005. Divine interventions: Needs analysis for post-graduates academic literacy and curriculum development, in a south African school of theology. *Language Educ.*, 19: 50-73.
- Jain, K.K., J. Fauzia, M. Vinita and G. Naveen, 2007. Job satisfaction as related to organisational climate and occupational stress: A case study of Indian oil. *Int. Rev. Bus. Res. Papers*, 3: 193-208.
- James, L.R., L.A. James and A.K. Ashe, 1990. The Meaning of Organizations. In: *Organizational Culture and Climate*, Schneider, B. (Ed.). Jossey-Bass, San Francisco, pp: 40-84.
- Kangis, P., D. Gordon and S. Williams, 2000. Organisational climate and corporate performance: An empirical investigation. *Manage. Decis.*, 38: 531-540.
- Keenan, K., 1996. *The Managing Guide to Motivating*. Ravette Pub. Ltd., West Sussex, ISBN-13: 978-1853047916, Pages: 62.
- Kleinginna, Jr. P.R. and A.M. Kleinginna, 1981. A categorized list of motivational definitions with a suggestion for a consensual definition. *Motivation Emotion*, 5: 263-291.
- Kolb, D.A., I.M. Rubin and J.M. McIntyre, 1979. *Learning Problem Solving*. In: *Organization Psychology: An Experiential Approach*, 3rd Edn., Kolb, D.A., I.M. Rubin and J.M. McIntyre (Eds.). Prentice Hall, Eaglewood Cliffs, New Jersey, pp: 27-54.
- Kreitner, R. and A. Kinicki, 2007. *Organisational Behavior*. McGraw-Hill, USA.
- Kroch, E.A. and K. Sjoblom, 1994. Schooling as human capital or a signal: Some evidence. *J. Human Res.*, 29: 156-180.

- Lepak, D.P. and S.A. Snell, 1999. The human resource architecture: Toward a theory of human capital allocation and development. *Acad. Manage. Rev.*, 24: 31-48.
- Locke, E.A. and G.P. Latham, 1990. *A Theory Of Goal-Setting And Task Performance*. Prentice-Hall, Englewood Cliffs, 0139131388, Pages: 413.
- Lubit, R., 2001. Tacit knowledge and knowledge management: The keys to sustainable competitive advantage. *Organizational Dyn.*, 29: 164-178.
- McCall, Jr. M.W. and R.E. Kaplan, 1985. *Whatever It Takes: Decision Makers at Work*. Prentice-Hall, Inc., Englewood Cliffs, New Jersey.
- McClelland, D.C., 1988. *Human Motivation*. CUP Archive, Cambridge University Press, ISBN: 10-0521369517, Pages: 663.
- Mitzel, H.E., J.H. Best and W. Rabinowitz, 1982. *Encyclopedia Of Education Research*. 5th Edn., The Free Press, New York, ISBN: 9780029004500, Pages: 2126.
- Moorhead, G. and R.W. Griffin, 1998. *Organizational Behavior: Managing People and Organizations*. 5th Edn., Houghton Mifflin, Boston.
- Nahapiet, J. and S. Ghoshal, 1998. Social capital, intellectual capital, and the organizational advantage. *Acad. Manage. Rev.*, 23: 242-266.
- Neuman, W.L., 2000. *Social Research Methods: Qualitative and Quantitative Approaches*. 4th Edn., Allyn and Bacon, Boston.
- Newstrom, J.W. and K. Davis, 2006. *Organizational Behaviour: Human Behaviour at Work*. Irwin Professional Pub., USA.
- Ng, T.W.H. and D.C. Feldman, 2009. How broadly does education contribute to job performance? *Personnel Psychol.*, 60: 89-134.
- Nissen, M. E., 2005. Dynamic knowledge patterns to inform design: A field study of knowledge stocks and flows in an extreme organization. *J. Manage. Inf. Syst.*, 22: 225-263.
- Oketch, M.O., 2007. To vocationalise or not to vocationalise? Perspectives on current trends and issues in Technical and Vocational Education and Training (TVET) in Africa. *Int. J. Educational Dev.*, 27: 220-234.
- Organ, D.W., 1988. A restatement of the satisfaction-performance hypothesis. *J. Manage.*, 14: 547-557.
- Pallant, J., 2004. *SPSS Survival Manual*. Open University Press, London.
- Pinder, C.C., 1998. *Work Motivation in Organizational Behavior*. Prentice Hall, Upper Saddle River, New Jersey.
- Robbins, S.P., 1998. *Organisational Behaviour*. Prentice Hall, USA.
- Rotundo, M., 2002. The relative importance of task, citizenship and counterproductive performance to global ratings of job performance: A policy-capturing approach. *J. Applied Psychol.*, 87: 66-80.
- Schein, E.H., 2004. *Organizational Culture and Leadership*. 3rd Edn., Jossey-Bass, San Francisco.
- Suliman, A.M. and M.H. Abdullah, 2005. Towards a high performance workplace: Managing corporate climate and conflict. *Manage. Decision*, 43: 720-733.
- Tagiuri, R., 1996. *The Concept of Organizational Climate*. McGraw-Hill, Inc., Singapore.
- Teece, D.J., 1998. Capturing value from knowledge assets: The new economy, markets for know-how and intangible assets. *California Manage. Rev.*, 40: 55-79.
- Trusty, J. and S.G. Niles, 2004. Realized potential or lost talent: High school variables and bachelor's degree completion. *Career Dev. Quart.*, 53: 2-15.
- Vernon, P.E., 1960. *The Structure of Human Abilities*. Methuen, London.
- Vroom, V.H., 1964. *Work and Motivation*. Wiley, New York, Pages: 331.
- Walker, J.W., 1980. *Human Resource Planning*. McGraw-Hill Book Company, New York, Pages: 418.
- Watson, T., 1994. Linking employee motivation and satisfaction to the bottom line. *CMA Mag.*, Vol. 68.
- Welbourne, T.M., D.E. Johnson and A. Erez, 1998. The role-based performance scale: Validity analysis of a theory-based measure. *Acad. Manage. J.*, 41: 540-555.
- Wiersma, W., 2000. *Research Method in Education: An Introduction*. 7th Edn., Allyn and Bacon, Needham Heights, Pages: 476.