INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 12, Issue 10, (2022) E-ISSN: 2222-6990

Exploratory Factor Analysis and Variables Validity of Job Satisfaction on Head Teachers Job Performance in Palestine

Mohamad Zulkifli Bin Abdul Rahim[1], Hadeel Adel Hasan Abuayyash[1], Izzat Bin Ismail[1], Abdul Malek Bin A. Tambi[2]

[1]Department of Management Science Faculty of Business and Management Universiti Sultan Zainal Abidin, 21300, Kuala Nerus, Terengganu, Malaysia, [2]Alfa College University Deputy Vice Chancellor Office, Subang Square, Corporate Tower, 47500 Subang Jaya, Selangor

Email: hadeelayyash2017@gmail.com

Corresponding Authors Email: zulrahim@unisza.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i10/14845 DOI:10.6007/IJARBSS/v12-i10/14845

Published Date: *12* October 2022

Abstract

Good governance is the heart of effective head teacher performance. Conversely, ineffective head teacher performance management may be a symptom of ineffective governance. Effective oversight of the head teacher is the most important part played by the governing body in the overall governance of the school. The aim of this paper was to the use of Exploratory factor Analysis in extracting factors of Job Satisfaction and the factors of job performance among Palestinian headteachers primary school. Hence, this study intends to explore and determine the dimensionality of items measuring the job satisfaction and performance variables. A quantitative method is commonly used with survey and is considered the mainstay of the research for collecting data. The study was based on a pilot study conducted of a 100 headteachers respondents. The study also established content validity through a series of expert review, pre-test before running the EFA. Alpha coefficient (Cronbach's alpha) provided a reliable measure of internal consistency in pilot testing.

Keywords: Job Satisfaction, Job Performance, Headteacher, Exploratory Factor Analysis

Introduction

Development school is one of the Ministries of Education priorities with considering that school is the main part of Educational institutions (Majed et al., 2016). The education sector in developing countries facing real challenges. They are not in a position to offer good quality education (Al-hazmi, 2013). Primary education, it is viewed as the most important corner in the education process and the first stage of obligatory schooling (Alawneh & Mazoz, 2011). In Palestine, the education system has passed through some crucial stages, as well as a distinct political transition. The Integrated Learning Project was one of a series of educational reforms

introduced in Palestinian primary schools by the newly established Palestinian National Authority (PNA), which put health and education under its administration (Al-Ramahi & Davies, 2012). However, good governance is the heart of effective head teacher performance. According to (Hamail, 2018) headteachers satisfaction is one of the major things that bring a satisfactory in the whole educational institutions, which in turn affects the whole school and the student's sake, therefore enhancing academic process (Volkwein & Parmley, 2000). However, there are limited studies that have investigated the head teachers job satisfaction particularly in the context of Palestine (Mansoor, 2010). Factors such as a lack of salaries, affect negatively on their satisfaction and constantly among their performance (Abd-Alqader, 2013) Job satisfaction (JTS) refers to the extent of one's satisfaction with work. A satisfied employee is bound to feel happy, self-motivated, and content with his or her current responsibilities. Job satisfaction (JTS) is also related to stability and work-life balance Therefore, it is a necessity to investigate and address the issue of school head teachers job satisfaction (Al-Zaidi, 2008). Researchers (Al-hazmi, 2013; Alzaidi, 2008) pointed out that lack of cooperation and inconsistent decisions such as constraints, regulations, and lack of delegation authority to perform some tasks contribute to job dissatisfaction (Al-hazmi, 2013), eventually, their performance will be weak (Khoury, 2009). Thus, the objective of this study is to determine and analyse the factors which might affect the head teachers primary school job satisfaction and performance factors.

Literature Review

Numerous researchers have shown the relationship between job satisfaction and job performance. Job satisfaction is the general attitude that people have about their jobs (Abbas, 2014; Arifin, 2014; Farooqui, 2011; Dugguh, 2014). It can affect the satisfaction or dissatisfaction of employees if the job factors are considered positive or otherwise (Alhazmi, 2013). Despite the theoretical underpinnings, there is a lack of empirical investigation within school settings and contexts (Watson, 2013), and little is known about how the relationship between teachers and head teachers emerges (Spicer, 2012). In a study by Alhazmi (2013), concludes that female secondary school headteachers overall attitudes to their job were negative, were the factors of dissatisfaction linked to educational administration by the education authorities outside the school, including lack of cooperation and inconsistent decisions. A study concluded by (Mehrad, 2014) revealed that job satisfaction is one of the main factors in education that should be considered by managers and improve the needs of academic units toward work and its climates conditions, and one of the factors that affect positively is income. Additionally, Dugguh (2014), showed positive impacts of job satisfaction towards work performance. He recommended that orgnisation should use these factors in their job to make their employees satisfied and happy.

The Objective

This study intends to explore and determine the dimensionality of items measuring the job satisfaction and performance variables.

Method

Sample

The researcher proceeded the sample for this study at primary school head teachers in city of Hebron in Palestine. Overall, the researcher distributed the survey to 100 head teachers as a minimum number of sample size for conducting a pilot study to run the EFA as

recommended by (Awang, 2012). Furthermore, the researcher assured of confidentiality and anonymity.

Research Instrument

The questionnaire was designed based on previous literature. Items were adopted, customize and modified by the researcher to suit for the study. For job satisfaction variable ten measurements items were adapted from (Al-Zaidi, 2008; Torlak & Kuzey, 2019) and 14 items for work performance variable were adapted and customized from (David, 2006). As a consequence, a pre-test was conducted. The questionnaire was given for expert reviewer in the field of study when designing the questionnaire in order to ensure that the questionnaire is valid and reliable, and suit for this study (Muda et al., 2017). The instruments employed a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Likert scale is a measure of attitude designed to allow respondents to indicate how strongly they agree or disagree with carefully statements. This Likert scale was selected because it takes less time and easy to answer (Brown, 2000). Whereby they indicated the extent they agree or disagree ranging from these variable and ratings 1 for "strongly disagree" to 7 for "strongly agree. The data was first coded for the different variables on the instruments before the initial input of the data into SPSS Version 19. Coding of the data is essential to ease the analysis. The variables or items are abbreviated according to the variable name or variable name in SPSS and equally assigned numbers to easily identify the response for each respondent (Sekaran & Bougie, 2010).

Findings & Discussion

Exploratory Factor Analysis for Job Satisfaction

Exploratory factor analysis was performed on all subsets of the sample by using IBM-SPSS version 25.0 with the Principal Component Analysis (PCA) as the extraction method and the rotation method used was Varimax (Variation Maximization). In the EFA, the extraction involves grouping the items into possible component (s). The components having Eigenvalue closer to 1 or mostly above 1 are preferred. The results in table 1 showed that the data is adequate in order to proceed further with the data reduction in EFA, while the results indicated that the measure of sampling adequacy by Kaiser–Meyer–Olkin (KMO) value is excellent for all variables since it exceeded the required value of (0.60) Bandalos and Finney (2001); Awang (2012); Sharma (1996) and it indicated that the items were interrelated and they share common factors as recommended by (Coakes et al., 2006). Furthermore, the Bartletts' Test of Sphericity is significant (P-Value < 0.001) as suggested by (Hair et al., 2014,b).

Table 1
KMO and Bartlett's Test

Variable	KMO and Bartlett's Test		
Job satisfaction	Kaiser-Meyer-Olkin Measure of sampling Adequacy		0.750
	Bartlett's Test of Sphericity	Approx. Chi-Square	740.575
		Df	45
		Sig.	.000
Performance	Kaiser-Meyer-Olkin Measure (KMO)		.738
	Bartlett's Test of Sphericity	Approx. Chi-Square	693.999
		Df	91
		Sig.	.000

The results in the table 2 below shows that there are the three components emerged from EFA procedure made on job satisfaction variable, based on the computed eigenvalue greater than 1.0. The total variance explained for measuring this variable is 75.940. The cumulative variance is acceptable since it is exceed 60 % (Bahkia et al., 2019). The eigenvalues ranges between 5.106 & 1.037 The table also shows that there is four components emerged from EFA procedure made on performance variable, based on eigenvalue greater than 10. The total variance explained for measuring this variable is 70.526 , it is acceptable since it exceed 60 % were the eigenvalues ranges between 1.322 & 5.275.

Table 2
The Total Variance For all the Variables

code	Variable	component	Initial Eigen values			Rotation sums of squared values		
		1	5.106	51.059	51.059	5.106	51.059	51.059
JS	Job	2	1.451	14.508	65.566	1.451	14.508	65.566
	Satisfaction	3	1.037	10.374	**75.940**	1.037	10.374	**75.940**
WP	Work	1	5.275	37.679	37.679	5.275	37.679	37.679
	Performance	2	1.793	12.808	50.487	1.793	12.808	50.487
		3	1.483	10.594	61.081	1.483	10.594	61.081
		4	1.322	9.445	**70.526**	1.322	9.445	**70.526**

Extraction Method : Principal Component Analysis
Rotation Method : Varimax with Kaiser Normalization

The results in the below table 3 shows the results of Rotated Component Matrix that was conducted for the study. The factor loading of the all items belonging to Job Satisfaction variable were all exceed (0.60) as recommended by Hair et al (2006); Awang (2012) that the item with factor loading below 0.6 will not be accepted and will excluded from further analysis ,and the factor loading for items were ranges from 0.693 to 0.860, except one item JS6 has been deleted from further steps factor analysis due to low factor loading < (0.6). The items for job satisfaction variable JS4, JS2, JS3, JS1 were grouped under component number one “Salary“, while JS8, JS9, JS10 were grouped under component number two labelled by “Authority and Support“, and JS5,JS7 items were grouped under component number 3 “Morale”. Similarly, the Factor loading of all items belonging to work performance variable

were all exceed (0.60) and were ranges from 0.643 to 0.842, except one item WP15 get factor loading less than (0.60) has been deleted from further analysis (Awang, 2012). Thus, two items would not be used to measure their variables in the field study. Furthermore, the first component for performance variable, have five items JP19, JP20, JP18, JP17, JP22 were grouped under "quality & managerial ability". While the second component have 3 items JP21, JP24, JP13 were grouped under "quantity & Job Proficiency ", and the third component have 2 items were grouped under "professional development". The Forth component have 2 items were grouped under "Self–Appraisal & Job related Skill " and JP15 were excluded from further analysis. Instead of dealing with 24 items, it was reduced to 22 items, two items were excluded as mentioned above from further analysis.

Table 3
Rotated Components Matrix's

Variable	code	Item	COM 1	COM 2	COM 3	COM 4
Job satisfaction	JTS4	I feel satisfied with my chances for salary increment	.883			
	JTS2	My salary as a head teacher is compatible with my duties	.860			
	JTS3	I feel appreciated by the Ministry of Education when I think about my salary	.824			
	JTS4	My salary as a head teacher is different from other teachers working with me	.796			
	JTS6	The type of work I do is close to the job description	**DELETED**			
	JTS8	I have the authority to perform many tasks		.824		
	JTS9	I am satisfied with the work I do		.796		
	JTS10	My job is enjoyable		.779		
	JTS5	I am satisfied with my career as a head teacher			.725	
	JTS7	I am satisfied with my current job			.693	
Job performance	JP19	I am doing each step of my work carefully	.806			
	JP20	I keep on enhancing the quality of the educational process	.733			
	JP18	I am using resources in a cost-effective manner	.710			
	JP17	I appraise myself in terms of my ability to achieve my goals	.662			
	JP22	I always perform tasks according to deadlines under any condition	.643			
	JP21	I attend workshops and lectures to improve my performance		.842		
	JP24	Always come up with new and practical ideas to enhance performance		.832		

	JP 13	I know how to set right priorities in my work		.750		
	JP 15	I perform the tasks at higher level than my colleagues	**DELETED**			
	JP 14	My performance always meets the expectations of the director of education			.778	
	JP 11	I have the ability to perform essential tasks			.727	
	JP 12	I am energetic and active in dealing with my work			.696	
	JP 13	I am committed to the profession standards				.819
	JP 14	I keep on creating ideas that contribute to solution of problems				.775

Extraction Method : Principal Component Analysis
Rotation Method : Varimax with Kaiser Normalization

Reliability Test

Reliability refers to the extent to which a scale produces consistent result, if the measurements are repeated a number of items (Hair, 2010) and how far the relationship exists between indicators in the variable (Hair, 2010).Internal reliability can be reviewed using the Cronbach's Alpha value (Awang, 2014). As one of the pioneer researchers who discussed reliability, Nunnally (1978) recommended that Cronbach's Alpha values of more than 0.70 are acceptable .

Table 4
Reliability Test

Variable	No of items	Cronbach Alpha
Job satisfaction	10	0.860
Job performance	14	0.802

Table 4 shows the Cronbach's Alpha value for all the variables, and they have been exceeded (0.6) for all variable s as recommended by (Hair et al., 2014; Awang, 2012). This reliability analysis indicated that the three variable s involved in this study had good values for the reliability coefficient and were acceptable for further analysis.

Conclusion

In conclusion, the EFA assesses the dimensionality, validity and reliability of the job satisfaction and job performance measures evaluated by head teachers. As a result, there are twenty two items remaining for the final measurement framework, nine items under job satisfaction, and thirteen items remaining under job performance variable. The finding of this study offers a modification and new measures for the variable of job satisfaction and job performance based on headteachers evaluation. It is hoped that further analysis will contribute to sustainable development of the measurement items in education sector.

Theoretically, the contribution of this study lies in its ability to extend the insightson Two factor theory on the relationship between job satisfaction and job performance in the context of education. The outcome of this study is expected would further enhance new discoveries on the association between job satisfaction and job performance in education sectors worldwide.

References

Abbas, M., Raja, U., Darr, W., & Bouckenooghe, D. (2014). Combined effects of perceived politics and psychological capital on job satisfaction, turnover intentions, and performance. Journal of Management, 40(7), 1813-1830.

Abd-Alqader, A. A. (2013). School factors affecting the development of managers performance Secondary Schools in Gaza Governorates. The concept of management systems analysis. (Vol. 48, No. 4, p. 5-7).

Alawneh and Mazoz. (2011). Measuring the level of job satisfaction and organizational loyalty and the relationship between the teachers in the primary schools in the city of Nablus, Research presented to the Third Millennium Teacher Conference, University of Israa.

Alhazmi, F. (2013). Job satisfaction among female head teachers in Saudi Arabian secondary schools: a qualitative perspective (Doctoral dissertation, University of Southampton).

Al-Ramahi, N., & Davies, B. (2012). Changing primary education in Palestine: Pulling in several directions at once. International Studies in Sociology of Education, 12(1), 59–76. https://doi.org/10.1080/09620210200200083

Alzaidi, A. M. (2008). secondary school headteachers satisfaction in Saudia Arabia: The results of a mixed methods approach. annual review of Education, Communication & Language Sciences,1(6), 35–88.

Arifin, H. M. (2014). The influence of competence, motivation, and organisational culture to high school teacher job satisfaction and performance. International Education Studies.

Awang, Z. (2012). Research methodology and data analysis, 2nd ed. Malaysia : Penerbitan Universiti Teknologi MARA press .

Awang, Z. (2014). A handbook on SEM for academicians and practitioners: Step by step practical guides for the begineers (Vol. 2 Firs.). Perpustakaan Negara Malaysia: MPSW Rich Resources.

Bandalos, D. L., & Finney, S. J. (2001). Item parceling issues in structural equation modeling. New developments and techniques in structural equation modelling, 269, V296.

Bahkia, A. S., Awang, Z., Afthanorhan, A., Ghazali, P. L., Foziah, H. (2019). Exploratory Factor Analysis on occupational stress in context of Malaysian sewerage operations AIP Conference Proceedings.

Coakes, S. J., & Steed, L. (2007). SPSS Version 14.0 for windows: Analysis without anguish. Australia: John Wiley & Sons Australia, Ltd.

Marsden, D., Belfield, R. (2006), Pay for Performance Where Output is Hard to Measure: The Case of Performance Pay for School Teachers, in David Lewin, Bruce E. Kaufman(ed.) Advances in Industrial & Labor Relations (Advances in Industrial and Labor Relations, Volume 15) Emerald Group Publishing Limited, pp.1 – 34.

Dugguh, S., & Agaya, D. (2014). Job satisfaction theories: Traceability to employee performance in organizations. IOSR Journal of Business and Management, 16(5), 11-18.

Farooqui, M. S., & Nagendra, A. (2014). The impact of person organization fit on job satisfaction and performance of the employees. Procedia economics and Finance, 11, 122- 129.

Hair, J. F., Tomas, M. H., Christian, M. R. (2014 b). A primer on partial least Squares Structural Equation Modelling (PLS-SEM) .California : Saga publications ,Inc .

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis: A global perspective (7th ed.). New Jersey: Person Prentice Hall.

Hamail. (2018). Administrative Problems Facing Principals of Government High Schools in Palestine.

Marsh, H. W., Morin, A. J., Parker, P. D., & Kaur, G. (2014). Exploratory structural equation modelling: An integration of the best features of exploratory and confirmatory factor analysis. Annual review of clinical psychology, 10, 85-110.

Mehrad, A. (2014). The impact of income on academic staff job satisfaction at public research Universities, Malaysia. Journal of Educational, Health and Community Psychology, 3(2), 65-70.

Muda, H., Ali, M. H., and Jusoh, M. (2017). Measuring Teaching and Learning Performance in Higher Education. International Journal of education, Psychology and Counselling ,2(6), 57-70.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd Ed.). New York: McGraw-Hill.

Oppenheim, A. N. (1992). Questionnaire design, interviewing and attitude measurement., London: Pinter Pub Limited.

Sekaran, U., & Bougie, R. (2010). Research methods for business (fifth ed.). UK: John Wiley & Sons Ltd.

Sharma, S. (1996). Applied Multivariate Techniques. John Wiley & Sons. Inc, New York.

Spicer, D. E., Crawford, M., James, C., Bubb, S., Furniss, R., Jones, J., Wood, E. (2014). Effectively managing headteacher performance, (January). Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307358/HTPM_Final_Report.pdf.

Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. International Journal of Productivity and Performance Management.

Volkwein, J. F., & Parmley, K. (2000). Comparing administrative satisfaction in public and private universities. Research in Higher Education, 41(1), 95-116.