To What Extent Do the School and School Principal Variables Predict the Principal Job Satisfaction?

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Abstract

The purpose of this study was to answer the question, "to what extent do the school and school principal variables predict the principal job satisfaction?". Using the TALIS (Teaching and Learning International Survey) data deriving from OECD, 902 school principals at the schools where 15-year-olds students were enrolled, multiple regression analysis was performed to predict the job satisfaction by the other independent variables related to school context and school principal background. The independent variables deriving from the OECD database in the regression analysis were lack of pedagogical personnel/index, lack of material resources/index, school delinquency and violence, school climate-mutual respect, age, gender, year(s) working as a principal at this school, year(s) working as a principal in total, year(s) working in other school management roles, year(s) working as a teacher in total, year(s) working in other jobs, professional development duration, instructional leadership, teacher - pedagogical support personnel ratio, teacher - administrative or management personnel ratio, student - teacher ratio. The results revealed that the job satisfaction was moderately correlated with the independent variables. The strongest association existed between the principal job satisfaction and school climate-mutual respect which were positively and lowly associated. The school and school principal variables accounted for approximately 14% of the variance of the job satisfaction.

Keywords: Principal job satisfaction, school background, multiple linear regression analysis, talis

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1. Introduction

The job satisfaction is a core topic of organizational behavior research. And determining it has become a common activity in the organizations focusing on physical and psychological well-being of persons (Spector, 1997). Job satisfaction is a person's positive attitude towards his/her job (Rama-Maceiras, Parente & Kranke, 2012).

This operational definition can be applied to all jobs and all organizations (Bess & Dee, 2012). Cohrs, Abele, & Dette (2006) explained that it is a function of situational conditions, personal characteristics, and interactions. Also, job satisfaction is emotional, cognitive, and behavioral structure (Kocak & Eves, 2010). Moreover, job satisfaction is not only internal structure, but external. In this regard, the external job satisfaction is based on the work environment of persons (Coughlan, Moolman & Haarhoff, 2014).

The literature revealed that the variables such as job status, control over decision making, and financial rewards are positively associated with job satisfaction; but the variables such as workload, working conditions, pressure of time, difficulties with other disciplinary personals, and insufficient organizational support are negatively associated with job satisfaction (Bhakar & Mehta, 2011).

In addition, job satisfaction is a considerable factor in improving the people's identification with, involvement in, and emotional attachment to their organization (Zhang & Zheng, 2009); in improving health (Chalies, Amathieu & Bertone, 2013), on the intention to retire later (Kautonen, Hytti, Bogenhold & Heinonen, 2012); increasing the self-efficacy and decreasing burnout level (Federici & Skaalvik, 2012); developing organizational commitment (Izgar, 2008); developing organizational citizenship (Sesen & Basim, 2012).

In the schools, principals are critical factor for effective management and leadership; and also developing the organizations' vision, culture, and climate. For that a high job satisfaction of school principals is inevitably needed. Nevertheless, the job satisfaction is a complex structure and improving it entails better understanding this phenomenon. For that, contributing to understanding this phenomenon, the purpose of this study was to answer the question, "to what extent do the school and school principal variables predict the principal job satisfaction?"

2. Method

Using the TALIS (Teaching and Learning International Survey) 2013 data deriving from OECD, 902 school principals at the schools where 15-year-olds students were enrolled, Multiple Linear Regression Analysis (MLRA) was performed to predict the job satisfaction by the other independent variables related to school context and school principal background.

The independent variables indicated in Table 1 deriving from the OECD database in the regression analysis were lack of pedagogical personnel/index, lack of material resources/index, school delinquency and violence, school climate-mutual respect, age, gender, year(s) working as a principal at this school, year(s) working as a principal in total, year(s) working in other school management roles, year(s) working as a teacher in total, year(s) working in other jobs, professional development duration, instructional leadership, teacher - pedagogical support personnel ratio, teacher - administrative or management personnel ratio, student - teacher ratio (OECD.Stat, 2013).

Table 1. Independent Variables (OECD, 2014)

Label	Variable	Sample items
PLACKPER	Lack of Pedagogical Personnel/Index	- Shortage of qualified and/or [well performing] teachers - Shortage of vocational teachers
PLACKMAT	Lack of Material Resources/Index	- Shortage or inadequacy of instructional materials (e.g.Textbooks) - Insufficient internet access - Shortage or inadequacy of library materials
PSCDELIQS	School Delinquency and Violence/STSTDS	- Vandalism and theft - Intimidation or verbal abuse of teachers or staff

PSCMUTRS	School Climate - Mutual Respect/STSTDS	- There is mutual respect for colleagues' ideas - There is a culture of sharing success
AGE	Personal Background/ How old are you?	
GENDER	Personal Background/ Are you female or male? (Dummy coded)	1=Female; 0=Male
YEARSCH	Personal Background/ Experience/ Year(s) working as a principal at this school	
YEARPRIN	Personal Background/ Experience/ Year(s) working as a principal in total	
YEARMANG	Personal Background/ Experience/ Year(s) working in other school management roles	
YEARTTOT	Personal Background/ Experience/ Year(s) working as a teacher in total	
YEAROTJOB	Personal Background/ Experience/ Year(s) working in other jobs	
DURAPROF	Personal Background/ Professional development/ In courses, conferences or observational visits/ Duration	
PINSLEADS	Instructional Leadership/STSTDS	- I took actions to support co-operation among teachers to develop new teaching practices - I took actions to ensure that teachers feel responsible for their students' learning outcomes
TEACPEDA	Teacher - Pedagogical Support Personnel Ratio	
TEACADM	Teacher - Administrative or Management Personnel Ratio	
STUTEAC	Student - Teacher Ratio	

Table 2. Dependent Variable (OECD, 2014)

Label	Variable	Sample items
PJOBSATS	Job Satisfaction	- The advantages of this profession clearly outweigh the disadvantages - If I could decide again, I would still choose this job/position - I regret that I decided to become a principal

Lack of Pedagogical Personnel <PLACKPER> and Lack of Material Resources (PLACKMAT) had four response categories as 1 for "not at all", 2 for "very little", 3 for "to some extent" and 4 for "a lot". The School Delinquency and Violence <PSCDELIQS> had five categories categories as 1 for "never", 2 for "rarely", 3 for "monthly", 4 for "weekly" and 5 for "daily". Mutual Respect <PSCMUTRS> had four response categories as 1 for "strongly disagree", 2 for "disagree", 3 for "agree" and 4 for "strongly agree". Instructional Leadership < PINSLEADS> had four categories as 1 for "never or rarely", 2 for "sometimes", 3 for "often" and 4 for "very often". The dependent variable entitled Job Satisfaction < PJOBSATS> had four response categories as 1 for "strongly disagree", 2 for "disagree", 3 for "agree", and 4 for "strongly agree" (OECD, 2014).

The assumptions of regression analysis were investigated as follows (Starkweather & Herrington, 2014): The Normal P-Plot of regression standardized values and histogram of the standardized residual values on the reference line confirmed the assumptions regarding linear relationships. As investigating the Mahalanobis distance, the estimated values of skewness (21,436) and kurtosis (560,321) indicated no multivariate outliers.

In addition, the multi-colinearity was tested through bivariate correlations given in the Table 3. The bivariate correlations confirmed the data were available for multi-colinearity (Buyukozturk, 2007).

Table 3. Bivariate correlations of independent variables

Independent Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1- PLACKPER															
2- PLACKMAT	,184*														
3- PSCDELIQS	,116*	,025													
4- PSCMUTRS	-,088**	,005	-,230*												
5- AGE	-,015	-,055	-,005	,017											
6- GENDER	-,048	-,034	-,085**	,037	,045										
7- YEARSCH	-,143*	,016	-,056**	,038	,440*	-,031									
8- YEARPRIN	-,116*	-,018	-,028	,100**	,553*	-,039	,729*								
9- YEARMANG	,023	-,140*	-,042	,069**	,246*	,045	-,045	-,052							
10- YEARTTOT	-,010	,072**	-,073**	-,011	,617*	,049	,338*	,287*	,261*						
11- YEAROTJOB	,014	,133*	-,075**	,045	,008	-,044	,011	-,003	-,006	,056**					
12- DURAPROF	,050	,021	-,120*	,141*	-,070**	,017	-,042	-,029	,007	-,030	,065**				
13- PINSLEADS	,089**	-,018	-,200*	,219*	-,008	,094**	-,067**	-,011	,086**	,031	,045	,155*			
14- TEACPEDA	,017	,097**	-,143*	,064**	-,062**	,001	-,002	-,085**	,015	,024	,024	,040**	,096**		
15- TEACADM	,002	,218*	,174*	-,072**	-,010	,089**	,090**	,056**	-,224*	,023	-,025	,069**	-,192*	,048	
16- STUTEAC	,050	,075**	-,104**	,058**	,036	-,034	-,048	-,003	,077**	,016	-,012	,066**	-,017	,035	-,122*

3. Results

The independent variables were used to predict principal job satisfaction. Table 4 shows the results of the MLRA to predict the job satisfaction. The results revealed that the job satisfaction was moderately correlated with the independent variables (R=.37). The strongest association existed between the principal job satisfaction and school climate-mutual respect which were positively and lowly associated (R=.27).

The predicted model for principal job satisfaction was statistically significant, $F(16,885)=8.891$, p< .00, and accounted for approximately 14% of the variance of the principal job satisfaction ($R^2=0.137$). The mutual respect affecting school climate was relatively the strongest predictor of principal job satisfaction ($\beta= .22$). The other significant predictors of principal job satisfaction were as follows: Lack of material resources ($\beta= -.08$); female gender ($\beta= -.08$); age ($\beta= .15$); year working as a teacher in total ($\beta= -.10$); instructional leadership ($\beta= .11$); teacher - administrative or management personnel ratio ($\beta= -.10$)

Table 4. The Results of Multiple Regression Analysis (MLRA) of Predicting the Principal Job Satisfaction

Labels	Variable	B	SE B	β	r**
	Constant	9,427	,759		
PLACKPER	Lack of Pedagogical Personnel/Index	-,019	,093	-,007	-,027
PLACKMAT	Lack of Material Resources/Index	-,236	,097	-,082*	-,118
PSCDELIQS	School Delinquency and Violence/STSTDS	-,061	,034	-,060	-,142
PSCMUTRS	School Climate - Mutual Respect/STSTDS	,197	,030	,222*	,269
GENDER	Personal Background/ Are you female or male?	-,298	,113	-,084*	-,046
AGE	Personal Background/ How old are you?	,035	,011	,146*	,070
YEARSCH	Personal Background/ Experience/ Year(s) working as a principal at this School	-,009	,014	-,030	-,016
YEARPRIN	Personal Background/ Experience/ Year(s) working as a principal in total	-,004	,013	-,017	,038
YEARMANG	Personal Background/ Experience/ Year(s) working in other school management roles	,000	,010	,002	,075
YEARTTOT	Personal Background/ Experience/ Year(s) working as a teacher in total	-,017	,007	-,098*	-,029
YEAROTJOB	Personal Background/ Experience/ Year(s) working in other jobs	,000	,008	-,001	,020
DURAPROF	Personal Background/ Professional development/ In courses, conferences or observational visits/ Duration	,001	,002	,017	,073
PINSLEADS	Instructional Leadership/STSTDS	,101	,030	,114*	,184
TEACPEDA	Teacher - Pedagogical Support Personnel Ratio	-,002	,003	-,018	-,005
TEACADM	Teacher - Administrative or Management Personnel Ratio	-,041	,014	-,098*	-,172
STUTEAC	Student - Teacher Ratio	,007	,006	,042	,073

Note: The dependent variable was Principal Job Satisfaction (PJOBSATS) R=0.371 ; $R^2=0.137$; F(16,885)=8.891
*p< .05
** The correlations indicated the bivariate correlations of the independent variables and dependent variable

The estimated linear regression equation was as follows:

PJOBSATS = 8,830 -,019PLACKPER -,236PLACKMAT -,061 PSCDELIQS +,197PSCMUTRS +,298AGE - ,035GENDER -,009YEARSCH -,004YEARPRIN +,000YEARMANG -,017YEARTTOT +,000YEAROTJOB +,001DURAPROF +,101PINSLEADS -,002TEACPEDA -,041TEACADM +,007STUTEAC

As indicated in the linear regression equation, covering raw regression coefficients, mutual respect affecting school climate is associated with a partial regression coefficient of .197 signifying that every additional point in the mutual respect affecting school climate predicts an increment of .197 in the proportion of principal job satisfaction.

In addition, the other independent variables which cause increment in the proportion of principal job satisfaction are as follows: Instructional leadership is associated with a partial regression coefficient of .101 signifying that every additional point in the score of instructional leadership predicts an increment of .101 in the proportion of principal job satisfaction. Age is associated with a partial regression coefficient of .035 signifying that every additional point in the age predicts an increment of .035 in the proportion of principal job satisfaction.

In addition, the other independent variables which cause decrement in the proportion of principal job satisfaction are as follows: Lack of material resource is associated with a partial regression coefficient of -.236 signifying that every additional point in this lack of material predicts a decrement of .236 in the proportion of principal job satisfaction. Female Gender is associated with a partial regression coefficient of -.298 signifying that every additional point in female gender predicts a decrement of .298 in the proportion of principal job satisfaction. Year working as a teacher in total is associated with a partial regression coefficient of -.017 signifying that every additional point in Year(s) working as a teacher in total predicts a decrement of .017 in the proportion of principal job satisfaction. Teacher - Administrative or Management Personnel Ratio is associated with a partial regression coefficient of -.041 signifying that every additional point in Teacher - Administrative or Management Personnel Ratio predicts a decrement of .041 in the proportion of principal job satisfaction.

4. Conclusion

The results revealed that the job satisfaction was moderately correlated with the independent variables. The strongest association existed between the principal job satisfaction and school climate-mutual respect which were positively and lowly associated. The school and school principal variables accounted for approximately 14% of the variance of the job satisfaction. The results of this study confirmed that the principal job satisfaction is a complex structure that is affected by many factors.

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