

Examining the Relationship Between the Aspects of School Working Conditions and Teachers' Intent to Stay as Mediated by Job Satisfaction

Petros Woldu Fessehatsion Dr. Pai Peng School of Education, Huazhong University of Science and Technology, Wuhan, China

Doi:10.19044/esj.2022.v18n12p213

Submitted: 14 April 2022 Accepted: 28 April 2022 Published: 30 April 2022 Copyright 2022 Author(s) Under Creative Commons BY-NC-ND 4.0 OPEN ACCESS

Cite As:

Fessehatsion P.W. & Peng P. (2022). *Examining the Relationship Between the Aspects of School Working Conditions and Teachers' Intent to Stay as Mediated by Job Satisfaction*. European Scientific Journal, ESJ, 18 (12), 213. https://doi.org/10.19044/esj.2022.v18n12p213

Abstract

This study sought to examine the relationship among the aspects of school condition, job satisfaction, and intent to stay with a sample size of 833 teachers working at elementary, middle, and secondary schools in the central administration of Eritrea. Survey data were analyzed using a structural equation model (SEM). Our results showed that teachers were more likely to stay in their profession when they experienced supportive school leadership, effective professional development, and more access to school resources. Besides, the study revealed that early career teachers are more likely to leave than their mid-career, and veteran counterparts. Moreover, the findings demonstrated that overall job satisfaction partially mediates the relationship between intent to stay and (a) leadership support, (b) school resources, (c) professional development, and (d) students' discipline. The practical implication of the findings suggested that measures targeting the improvement of the school environment should also aim to enhance overall job satisfaction to retain teachers in their profession.

Keywords: Eritrea, Intent to stay, Job satisfaction, School Working Condition

Introduction

The most vital and important resource in an education system is the teaching force because the quality and strength of the educational system depend on the availability of experienced and effective teachers (Brill & Mccartney, 2008; Ashiedu & Scott-ladd, 2012). The problem of recruiting and retaining sufficient teachers in schools is a worldwide phenomenon (DeAngelis & Presley, 2011; Mulkeen & Crowe-Taft, 2010). Developing countries, particularly Sub-Saharan Africa, have the largest teaching force shortage at all levels (UNESCO-UIS, 2013). This shortage of teachers is partly caused by high attrition rates among teachers, apart from the limited supply of the teachers' training institutions. According to large quantitative data from the developed world, the main remedy is to devise efficient and effective strategies to retain and sustain teachers in the profession (Holbeche, 2009; Inman & Marlow, 2004).

Teacher retention conceived as keeping teachers in their profession is an epiphenomenon resulting from effective schools (Aldridge & Fraser 2016). Conducive school working condition is positively associated with improved students' performance, increased graduate rate, and teacher retention (Ingersoll 2001; Johnson et al., 2012). It is argued that a school with conducive working conditions can be attractive, satisfying, and engaging for both the students and teachers (Roch & Sai, 2018; Smith et al., 2014). In such an environment, students can flourish and teachers can persevere and be steadfast in their profession. For this reason, scholars, researchers, and policymakers have diverted their attention towards teacher retention to enhance and assure the quality of education standards (Hughes, 2012; Geiger & Pivovarova, 2018).

Since school working conditions play an important role in retaining teachers (Kelchtermans 2017), it is crucial to examine its components. Some of the components include school leadership, remuneration, professional development, self-efficacy, teacher autonomy, and so on were found to contribute to teachers' intent to leave (Ladd, 2011; Struyven & Vanthournout, 2014). Previous studies focused more on the problems rather than teachers' motives to stay in the profession. In this study, we aimed to fill the abovementioned gap. It deserves attention due to the belief that retaining experienced and effective teachers could contribute to transferring best practices to new teachers and bolster school teachers' professionalism. Furthermore, the majority of the few studies on teachers intend to stay focused on either novice or veteran teachers separately which left a gap to investigate teachers of all career levels in a single research framework.

Eritrea, like many Sub-Saharan African countries, experiences a serious teacher shortage at all levels of the school system caused largely by teacher attrition (Harber 2017). There have been few previous studies on this

topic in the country. To contribute to the limited teacher retention literature in Sub-Saharan Africa and increase the knowledge of teachers' retention in the region, this study examined the aspects of school conditions that contribute to teachers' intent to stay in Eritrea. Specifically, this study examines the relationship between the constituents of the school condition and intent to stay mediated by overall job satisfaction.

More specifically, the following questions have been used to guide the study;

- a) Is there a significant positive relationship between the aspects of school working conditions and the intent to stay?
- b) Is there a significant relationship between the aspects of school condition and overall job satisfaction?
- c) Does overall job satisfaction mediate the relationship between aspects of the school condition and intent to stay?

Literature Review

According to Aboobaker et al. (2019) intent to stay refers to an employee's conscious and deliberate willingness to remain in the organization. It is regarded as a good indicator of actual retention in the teaching profession (Perrachione et al., 2008). Studying teachers' intent to remain is vital to understand why some teachers continue and others leave the profession. Decades of studies have documented some of the factors associated with teachers' intent to stay. Personal, working conditions, psychological, social, economic, and external factors are the most cited considerations linked to teachers' intent to stay (Swars et al., 2009; Fall & Billingsley, 2011). For instance, Bettini et al. (2020) documented school resources, collegial support, and school leadership as aspects of school working condition factors linked to teachers' intent to stay. Therefore, our examination was based on the empirical literature exploring the school working condition variables in relation to overall job satisfaction and teachers' intent to stay in schools worldwide (Roch & Sai, 2018; Nguyen, 2021).

The Aspects of School Working Conditions

Many studies suggest that school working condition plays a determinant role in retaining teachers in their profession (Chesnut & Cullen 2014; Hahs-Vaughn & Scherff, 2008). The majority of studies on teachers' retention were conducted in developed countries, and few were conducted in developing countries, specifically, Sub-Saharan African countries. Therefore, this study focused on the effect of the school condition components on teachers' intent to stay mediated by job satisfaction in Eritrea, a Sub-Saharan African country.

A school that provides suitable and conducive conditions of employment and a collaborative environment could be in a better position to retain good teachers (Fullan 2001). School condition-related variables such as leadership support, collegial support, student behavior, and professional development are considered important for enhancing teachers' commitment and continuity (Ingersoll, 2001; Johnson et al., 2012). In this regard, considerable studies claimed that a supportive and positive environment helps to retain teachers in their profession (Billingsley et al., 2020). The supportive school administration is the most cited school environment factor that helps retain teachers in the profession (Aldosiry, 2020; Ladd, 2011). It was also claimed that when teachers have a positive relationship with their colleagues, they are likely to stay in school (Roch & Sai, 2018). Besides, many studies contend that continuous professional development plays an important role in increasing retention (Curry et al., 2005; Ladd, 2011).

Students' discipline is another aspect of the school working climate that affects teachers' intent to stay (Geving, 2007; Perrachione et al., 2008). Students' behavior has been cited as a force that pushes teachers to leave the teaching profession (Kim et al., 2005; Wynn et al., 2007). Moreover, Loeb et al. (2005) and Bettini et al. (2020) in their study reported that the physical features of the school and the availability of instructional resources were significant contributors to teachers' continuity. Fall and Billingsley, (2011) suggested that schools with adequate resources are more likely to retain teachers in their profession.

In conclusion, we conceptualized the school working conditions include (a) level of administrative support (b) teachers' collegial relationships (c) professional development (d) availability of resources, and (e) students' discipline. This conceptualization is based on the work of Kukla-Acevedo (2009), which we believe reflects the Eritrean school context.

Job Satisfaction

Job satisfaction is a critical variable related to employee retention (Tourangeau & Cranley 2006). Teachers who feel a sense of satisfaction with what they do are more likely to remain longer in the profession (Okubanjo, 2014; Weiqi, 2007). Similarly, Al-Omari et al. (2008) and Perrachione et al. (2008) argued that satisfied teachers are more likely to remain in the teaching profession. Factors affecting teachers' job satisfaction include school leadership, collegial relationships, career development opportunities, and students' behavior (Liu & Ramsey, 2008; Nir & Bogler, 2008; Liu, 2012). In this study, we decided to measure job satisfaction as overall satisfaction of teachers based on the work of Skaalvik and Skaalvik (2014).

Conceptual Framework

Many recent studies have documented that the working condition is highly related to job satisfaction and the decision to stay in the profession (Ashiedu & Scott-ladd, 2012; Cha & Cohen-Vogel, 2011). Unfortunately, studies in Sub-Saharan African countries are very limited, and narrow in scope. In particular, the interplay among the aspects of school condition, job satisfaction, and intent to stay is under-investigated. Therefore, the current study focuses on Eritrea, a Sub-Saharan African country, which is under educational reform. The present study seeks to examine the interrelationship between the aspects of school conditions and teachers' intent to stay mediated by job satisfaction using a structural equation model analysis. The conceptual framework for this study is-thus developed, as indicated in Figure 1.



Figure 1. Conceptual model Based on Literature

Methodology

This study used a quantitative and correlational research design using a questionnaire to collect data on the identified school working condition factors that predict teachers' intent to stay. Teachers' retention was measured alongside five school condition variables and job satisfaction. A total of 950 elementary, middle, and secondary school teachers in the central region of Eritrea participated in the survey. They were randomly selected from 53 schools including 21 elementary, 18 middles, and 14 secondary schools found in both urban and rural areas in the region, based on socio-economic characteristics, and student population. A total of 848 filled questionnaires were collected representing a return rate of 89%.

Instruments

Aspects of School Working Environment: The school working condition scale consisted of five variables based on previous research. These include leadership support (Skaalvik and Skaalvik, 2011), professional development (Geiger & Pivovarova, 2018), collegial support (Jo, 2014), and the constructs of students' behavior, and school resources were developed based on the studies of Struyven and Vanthournout, (2014) and Johnson et al. (2007). Originally 23 items were included to measure the attitudes of teachers on the five constituents of school conditions. The leadership support factor consisted of five items. The constructs of students' behavior, collegial support, and school resources consisted of four items each. Finally, six items were connected to professional development factors. Each item was measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Job satisfaction: To assess the overall job satisfaction of the respondents, 6 items were developed based on existing literature (Skaalvik & Skaalvik 2011; Skaalvik & Skaalvik 2014). The items were measured based on a 5-point Likert scale ranging from 1(strongly disagree to 5(strongly agree).

Intent to Stay (Retention): The constructs of the intent to stay (retention) were measured with 5 items based on empirical works on teachers' retention (Kyndt, et al., 2009; Skaalvik & Skaalvik, 2011). All the items were measured based on a 5-point Likert scale ranging from 1(strongly disagree) to 5 (strongly agree).

Data Collection and administration

After receiving permission from the Central Region Ministry of Education (MoE) branch office, the researchers contacted the school directors of the selected schools. After explaining the aim of the study, we requested permission to distribute questionnaires to representative teachers in their schools. All the school directors offered their endorsement and the pedagogy heads of the schools gave us a list of teachers whereby respondents were selected randomly. The participants responded to the paper-based survey and were asked to submit it back to the pedagogy head within 3 to 5 days of distribution. Of the total of 848 questionnaires collected, 833 were valid for data analysis. Approximately 460 (55.2%) were male, and the remaining 373 (44.2%) were female teachers. A slight majority of the teachers were working at the elementary level (37.2%), middle school 34.7%, and secondary school 28.1%. In reference to their locales, 60.7% were from urban schools, 8.8% were from suburban schools, and the remaining 30.5% were from rural schools.

Teacher Characteristics	Frequency	%age
Gender	x v	
Male	460	55.2%
Female	373	44.8%
Age		
25 or under	90	10.8%
25-35	299	35.9%
36-45	191	22.9%
46 and above	253	30.4%
Highest Degree		
Certificate	254	30.5%
Diploma	362	43.5%
Bachelor Degree	211	25.3%
Master Degree	6	.7%
Marital Status		
Unmarried	297	35.7%
Married	536	64.3%
Teaching Experience (years)		
0-5	160	19.2%
6-10	197	23.6%
11-15	92	11.0%
16-20	115	13.8%
Greater or Equal to 21	269	32.3%
School Level		
Elementary	310	37.2%
Middle	289	34.7%
Secondary	234	28.1%
School Location		
Urban	506	60.7%
Sub-Urban	73	8.8%
Rural	254	30.5%

Table 1 Desults of teachers' demographic characteristics

Data Analysis

Descriptive, correlational and inferential analyses were performed using the Statistical Package for the Social Sciences (SPSS) Version 23. The mean and standard deviation were used to determine the response levels of the teachers regarding the variables. Moreover, a one-way analysis of variance (ANOVA) was performed to examine the significance of the group difference in the intent to stay across the teacher careers (novice, mid-career, and latecareer).

Confirmatory factor analysis (CFA), and structural equation modeling (SEM) were applied to analyze the data using AMOS 21 software. First, we

analyzed the confirmatory factor analysis of the individual variables correlated to their respective Items of measurement. Second, we conducted a confirmatory factor analysis of all variables in a single model with their corresponding items of statements. Finally, three models of SEM were analyzed to estimate the measured variables, and create a causal relationship among them simultaneously (Byrne, 2012). The goodness of fit of the structural equation model was evaluated using indices including CFI, IFI, TLI, and RMSEA (Kline, 2016). For the CFI, IFI, and TLI indices, values greater than .95 are considered acceptable as a good fit to the data (Byrne, 2012). Moreover, RMSEA values of .05 or less are considered indicators of good fit (Kline, 2016).

Results

Descriptive statistics

and correlations are reported in Table 2. The mean response for both Collegial support and intent to stay was lower compared to the teachers' mean response to the remaining five variables. The inter-correlations among all the variables were statistically significant at the p <.01 significance level. All independent variables showed a statistically positive correlation with intent to stay as presented in Table 2. Job satisfaction had the highest correlation with leadership support (r = .50, p <.01), followed by school resources (r = .47, p < .01), and professional development (r = .39, p < .01). Intent to stay was strongly associated with job satisfaction (r = .62, p < .01), followed by school resources (r = .43, p < .01).

Variables	М	SD	L]
			PD	SD	CL	SR	LS	Js	1
Profess_Dev	3.613	.824	1						
Student_Dis	3.584	.760	.407**	1					
Colleg_sup	2.937	.390	.448**	.367**	1				
School_Res	3.638	.766	.666**	.563**	.447**	1			
Leader_Sup	3.529	.552	.587**	.433**	.382**	.561**	1		
Job Satisfaction	3.922	1.099	.397**	.387**	.250**	.473**	.499**	1	
Intent to Stay	2.344	.9589	.428**	.301**	.200**	.475**	.419**	.620**	

Note. ** significance level at p <.01

The One-Way ANOVA test was carried out to investigate the difference in the teachers' intent to stay across different career stages. The result indicated that teachers with less than five years of experience (early stage of their career) had lower intent to stay (M=2.18, S.D = 1.02) compared to their counterparts with experience between eleven to twenty years (M = 3.05, S.D = 1.18), and veteran teachers with more than twenty years of experience (M=3.49, S.D = 1.08). It is clear from this finding that veteran teachers have shown a higher probability of continuing in their profession compared to their early career and mid-career counterparts.

Table 5. Kesuit of One-way ANOVA test intent to stay by career stages										
					Welch Robust Test of Equality of means					
Variable	Categories	Ν	Mean	S.D	Statistic (F)	df1	df2	Sig.		
Teaching	<= 5 years	160	2.184	1.019						
Experience	6-10	197	2.342	1.099						
	11-20	207	3.047	1.179	70.037	3	435.367	.000		
	>=than 21	269	3.489	1.076						

Evaluation of Measurement Models

Measurement model readjustments guided by theory were made until an acceptable model fit and data were obtained. First, the measurement model for the latent models of the aspects of school working conditions was formulated, and their fit and factor loadings are presented in Table 3. **Table 4.** Factor Loadings of the latent variables of School Working Environment

Latent Variable	Lead_Sup	Coll_Sup	Prof_Dev	Sch_Res	Stud_Dis
Items' standardized	SL_1	CL_1	PD_1	SR_1	SD_1
Loadings and	.75 (.025)	.78 (.025)	.74(.037)	.71(.043)	.82 (.031)
standard Errors	SL_2	CL_2	PD_2	SR_2	SD_2
	.84(.025)	.77(.024)	.72(.040)	.74(.037)	.71(.036)
	SL_3	CL_r3	PD_3	SR_3	SD_3
	.74(.025)	.63(.024)	.75(.037)	.74(.038)	.79(.030)
	SL_4	CL_4	PD_4	SR-4	SD_r4
	.70 (.029)	.451 (.032)	.59(.037)	.53(.044)	.69(.038)
	SL_5		PD_5		
	.66 (.026)		.61(.039)		
			PD_6		
			.71(.038)		
Residual Covariance			Pd_4 with PD_5		SD_2 with SD_r4
			.132(.032)		.178(.031)
X ² /df	2.544	1.877	1.774	1.00	1.803
CFI	.996	.998	.996	1.00	.999
SRMR	.0162	.0120	.0146	.0028	.0052
RMSEA	.043	.032	.031	.000	.031

The measurement models of leadership support, collegial support, and school resources obtained a good fit. The measurement models for professional development and student discipline obtained a good fit after allowing for residual correlations. For professional development, residuals of the items related to "PD_4" and "PD_5" showed a substantial commonality and thus, allowed to be correlated. Similarly, for students' discipline, residuals of the items "SD_2" and "SD_r4" displayed a substantive communality, and were allowed to be correlated.

The second step was to confirm the CFA of job satisfaction (JS) measurement model which was composed of five items. The second revised model of the job satisfaction test allowed the correlations of the error variance between JS_1 and JS_4, and JS_4 and JS_6. The result of the chi-square along the other model fit indices showed the best-supported model fit of the data (X^2 (3) = 1.895, p = .602; SRMR = .0043 and RMSEA = .000). All the standardized factor loadings were significant at p < .05 level. The values of the factor loadings ranged from .63 to .86. The internal consistency of the constructs of the job satisfaction were at their best level with a Cronbach alpha = .889.

The third step was to confirm the measurement model of the intent to stay composed of five items. The initial measurement model did not fit the data well. After several model fit test trials, by allowing the error variance of RET_5 to be correlated with both RET_2 and RET_4, the best model fit was achieved. The result of the chi-square along the other better model fit indices showed the best-supported model fit of the data (X^2 (3) = 5.332, p =.149; SRMR = .0046 and RMSEA = .031, CFI=.999). All the standardized factor loadings were significant at the p < .05 level. The values of the factor loadings ranged from .76 to .90. The internal consistency of the constructs of the intent to stay factors was at their best level with a Cronbach alpha = .938.

The fourth step was to test a CFA model that includes all the measurement scales of all the variables. The model had an acceptable fit to the data with $X^2(408) = 778.289$, IFI = .973, TLI = .970, CFI = .973 and RMSEA = .033.

The convergent validity was indicated by indicator loadings which exceed .63, and the average variance extracted (AVE) which was found to be higher than .50. Discriminant validity was indicated by the value for which the cross-loadings with all constructs less than the indicator's outer loadings. The internal consistency was measured by the composite reliability and Cronbach alpha which was greater than .70, indicating good reliability. The CFA and the validity results are indicated in Table 4 below.

	Convergent Validity			Internal Consistency		Divergent Validity	
Factor	Loadings	Indicator reliability	AVE	CR	α	Cross-loadings < outer loadings	
Leader_Support			0.551	0.859	.856	Yes	
SL_1	.75	.56					
SL_2	.83	.69					
SL_3	.75	.56					
SL_4	.71	.50					
SL_r5	.67	.44					
Collegial Support			0.535	0.774	.770	Yes	
CL_1	.76	.58					
CL_2	.79	.63					
CL_4	.63	.40					
Professional_Develop			0.520	0.846	.846	Yes	
PD_1	.76	.57					
PD_2	.70	.50					
PD_3	.75	.56					
PD_4	.59	.35					
PD_5	.63	.40					
PD_6	.71	.51					
School_Resource			0.532	0.773	.770	Yes	
SR_1	.68	.46					
SR_2	.75	.57					

Table 5. Results of Confirmatory Factor Analysis for the whole model

ISSN: 1857-7881 (Print) e - ISSN 1857-7431

SR_3	.75	.56					
Student_Discipline			0.573	0.842	.852	Yes	
SD_1	.82	.67					
SD_2	.70	.49					
SD_3	.81	.66					
SD_ r4	.69	.47					
Job Satisfaction			0.619	0.889	.889	Yes	
JS_1	.86	.75					
JS_2	.86	.74					
JS_3	.85	.73					
JS_4	.70	48					
JS_6	.63	40					
Intent to Stay			0.753	0.938	.838	Yes	
RET_1	.88	.78					
RET_2	.88	.78					
RET_3	.89	.80					
RET_4	.90	.80					
RET 5	78	61					

Notes. 1. N= 833, Standardized Factor Loadings were all significant at the p > .05 level. 2. $X^2(408) = 778.289$, SRMR= .035, IFI=.97, TLI= .97, CFI= .977, RMSEA=.033

The Structural Equation Model

European Scientific Journal, ESJ

April 2022 edition Vol.18, No.12

After ensuring the data fit of the measurement models, and validity of the constructs, the final step of the data analysis was to conduct a structural model with the latent variables. Three models were explored by means of a structural equation model to investigate the relationship of the aspects of school working conditions, job satisfaction, and intent to stay. First, we examined the joint impact of the components of school working conditions-leadership support (lead Sup), collegial Support (Coll_Sup), professional development (Prof_Dev't), school resources (Sch_Res), students' discipline (Stud_Dis) on Job satisfaction (Job_sat) simultaneously. All the aspects of school working conditions with the exception of collegial support indicated a significant positive correlation with job satisfaction. The final model fit was considered by dropping the insignificant collegial support and showed a good model fit as indicated in table 5 below.

It can be observed that leadership support, school resources, and students' discipline had a slightly weaker positive association with job satisfaction of .26, .15, and .16 respectively, whereas, professional development had a very weak yet positive correlation to job satisfaction at .090.

Dependent Variable	Independent Variable	Standardized Effect-	SE	р
	Lead_ Sup	.265	.089	.000
Job Satisfaction	Prof_Dev't	.090	.064	.045
	Sch_Res	.147	.074	.007
	Stud_Dis	.156	.064	.000
Notes Eit Indiana	$V^{2}/4f = 1.720$ SDMD =	025 DMCEA - 020 CEL	002	

|--|

Note: Fit Indices, $X^2/df = 1.720$, SRMR = .035, RMSEA=.029, CFI= .983

Then, the second model investigated the structural equation model fit analysis of the aspects of school working conditions with the intent to stay. We entered the different aspects of school working conditions simultaneously to assess their joint impact on the intent to stay. As the relations of collegial support and students' discipline with intent to stay became insignificant, they were removed to arrive at the final model of school working conditions and intent to stay (see Table 5).

All three remaining components of school working conditions maintained a slightly moderate association with the intent to stay. School resources showed the strongest relationship with intent to stay (.23), followed by leadership support (.21) and professional development (.16).

Table 7. Relations between aspects of school working conditions and intent to stay								
Dependent	Independent Var	iable Standardized	Effect- SE	р				
Variable								
	Lead_ Sup	.208	.092	.000				
Intent to Stay	Prof_Dev't	.164	.069	.000				
$R^2 = .24$	Sch_Res	.225	.072	.000				
NT (T' I 1' X72/10 1	702 CD (D 022 D)		007				

Note: Fit Indices: X²/df = 1.783, SRMR = .032, RMSEA=.031, CFI= .986

Finally, the mediating effect of job satisfaction on the relationship between the aspects of school working conditions and intent to stay was examined. Here, only the variables with significant positive relationships were considered. The final structural model fit indices showed an acceptable fit to the data with $X^2/df = 1.838$, SRMR = .036, CFI = .978, and RMSEA = .032. Leadership support showed a slightly moderate direct effect on job satisfaction (.27) and an insignificant positive effect on intent to stay. Professional development indicated a very weak direct relation to job satisfaction (.09), and a slightly moderate direct relation to intent to stay (.16). School resources had shown a slightly weaker direct relation to both job satisfaction (.14) and intent to stay (.16). Job satisfaction showed a strong positive effect on the teachers' intent to stay (.46). The significance of the indirect effect of the aspects of school working conditions mediated by overall job satisfaction on intent to stay was calculated using bootstrapping with 5000 samples. The result showed that school resources and students' discipline had a weak but significant indirect effect on intent to stay with β =.066 and β =.070, at p<.01 significance level respectively at a 95% confidence interval ranging from .178 to .285. The indirect effect of professional development on intent to stay showed weak and insignificant positive relation (.042). The indirect effect of leadership on intent to stay was slightly weaker with β =.066 at p<.01 significance level. **Table 8.** Mediating effect of iob satisfaction

Dependent Variable	Independent Variable	Direct Effect	SE	р	Indirect	SE	р	Total
variable	variable	Effect			enect			enect
Job	Lead_sup	.268	.090	.000				.268
Satisfaction								
R2= .27	Sch_Res	.144	.074	.009				.144
	Prof_Dev't	.091	.065	.049				.091
	Stud_Dis	.153	.064	.000				.153
Intent to Stay	Leader_sup				.123	.029	.000	.123
R2=.40	Sch_Res	.157	.054	.000	.066	.028	.016	.223
	Prof_Dev't	.154	.065	.000	.042	.026	.075	.196
	Stud_Disc				.070	.025	.004	.070
	Job_sat	.46	.033	.000		-	-	46

Note: X²/df = 1.838, SRMR= .036, IFI=.978, TLI= .975, CFI= .978, RMSEA=.032

Discussion

The purpose of this study was to examine the relationship between the aspects of school working conditions, job satisfaction, and intent to stay. From the final model, we found that the aspects of the school working condition and job satisfaction explained about 40% of the variance in teachers' intent to stay, and they interact with one another. The One-Way ANOVA test revealed that teachers at the early stages of their career, with less than five years of experience, we're less likely to continue in the profession compared to their mid-career and veteran counterparts. This finding is consistent with previous studies (e.g. Borman & Dowling, 2008; Hughes, 2012) which found that teachers at later stages of their careers are more likely to stay compared to their early career and mid-career teachers. This result may be explained due to a higher level of youth migration, and comparatively better payment in alternative employments. Moreover, teachers may find it easier to leave and try another job at a younger age since they have less sunk cost dilemma.

The first research question examined the effect of the aspects of school working conditions on teachers' intent to stay. Consistent with previous empirical evidence (Ashiedu & Scott-Ladd, 2012; Cha & Cohen-vogel, 2011; Fall & Billingsley, 2011), we found that three aspects of school working conditions-leadership support, professional development, and school resources are significantly associated with teachers' intent to stay. This means that teachers who perceive positive leadership support, effective professional development, and sufficient school resources had a high probability of continuing in the profession. Similarly, Bettini et al. (2020) claimed that

teachers with a positive attitude toward school climate were more likely to stay in teaching. When considered along with the other school working conditions, collegial support and students' discipline showed an insignificant but positive relationship with the intent to stay. This is contrary to Johnson et al. (2012) findings which showed that school working environments related to social nature are more important than material resources. This variation might be explained by the contextual difference in Eritrea in which teachers give less priority to the social nature of schools due to sustained economic problems, and youth migration.

The second question addressed the relationship between the components of the school working environment and overall job satisfaction. The results revealed a strong positive relationship between the four aspects of the school working condition and overall teachers' job satisfaction. It indicated that with better leadership support, professional development, school resources, and students' discipline, the teachers' overall job satisfaction increased. This is in line with the previous results (e.g. Perrachione et al., 2008; Song & Alpaslan, 2015; Toropova et al., 2020) which confirmed that aspects of the school working environment, such as leadership support, school resources, and students' discipline are highly related to job satisfaction. Correspondingly, Lam and Yan (2011) argued that the school working environment and job satisfaction are correlated. This study reiterated that teachers' having positive perceptions of these components of the school environment have a higher level of job satisfaction. From a practical point of view, it is noticed that school working condition affects the safety, determination, and motivations of teachers. Regarding collegiality, the results were contrary to past findings (Roch & Sai, 2018), with an insignificant positive effect on the teachers' intent to stay. This might be caused due to the lack of coordinated and planned teamwork, and organizing events to share experiences among the teachers.

The third question examined the relationship between overall job satisfaction and intent to stay. The results showed a strong positive relationship between job satisfaction and intent to stay. This implies that as teachers' job satisfaction increases, so does their intent to stay. Many empirical types of research documented that teachers with higher satisfaction are more likely to stay longer in teaching (Al-Omari et al., 2008; Billingsley et al., 2004; Ingersoll & May 2010; Perrachione et al., 2008; Suárez & Wright, 2019). Similarly, Rosser (2004) confirmed that these factors were directly associated. Programs and practices initiated to retain teachers must also aim to enhance the teachers' job satisfaction.

The last question was to examine the mediating effect of job satisfaction on the relationship between the aspects of school working conditions and intent to stay. Teacher job satisfaction was found to mediate the effects of leadership support, school resources, professional development, and students' discipline on intent to stay. Teachers with high job satisfaction resulting from a positive school working conditions would likely stay longer. Researchers like Grayson and Alvarez (2008) revealed that interventions affecting school working climate targeted to increase teachers' satisfaction could reduce their stress, which in turn increases their likeliness to continue.

Most of the previous studies examined teacher retention at the beginning stages of their career or late-career teachers separately, but very few have focused on beginning career, mid-career, and veteran teachers in one framework. Therefore, this study will provide insight into the understanding of teachers' retention across all career spans because teachers' motivations, commitments, and practices differ according to career stages.

Conclusion

The study aimed to investigate the relationship among the aspects of school working conditions, job satisfaction, and teachers' intent to stay. Across the central administration of Eritrea, teachers in their early careers have shown a higher level of intent to leave compared to their mid-career and veteran counterparts. This invites the educational authorities to make an intervention to make the profession appealing, and create mechanisms to Among the aspects of school working enhance teachers' motivation. conditions, leadership support, professional development, and school resources were important for teachers' intent to stay. Additionally, job satisfaction was found to partially mediate the relationship between these aspects of the school condition and teachers' intent to stay. Our findings revealed that the intervention actions on the aspects of school conditions should aim to enhance teachers' job satisfaction to ensure their continuity in the profession. Although the study found an insignificant relationship between collegial support and intent to stay, it doesn't mean that it should be ignored. It is necessary to value and recognize the vitally important role played by collegial support in empowering teachers professionally and creating a sense of being at home.

Although the current study adds to our understanding of the relationship among the aspects of school working conditions, job satisfaction, and intent to stay, it is important to mention certain limitations when discussing these findings. This study is mainly a quantitative study using instruments measured from self-reported constructs that are exposed to inflated bias, adding a qualitative study could enhance the depth of the analysis. Another limitation is that it was a cross-sectional study. Therefore, longitudinal studies could provide a broader overview of these relationships for extended periods of time. Furthermore, demographic variables were not controlled in this study. Thus, it would be worthwhile to examine these

controlled demographic variables in future research. Finally, the study neglected how the school condition constructs interact with each other in their relationships with job satisfaction and intent to stay.

Human Studies

All the respondents were participated in this survey study voluntarily, and all the ethical guidelines were followed.

Conflicts of Interest

The authors declare that there is no conflict of interest on this research study.

References:

- Aboobaker, N., Edward, M., & Zekkariya, K. (2019). Workplace spirituality, employee wellbeing and intention to stay: A multi-group analysis of teachers' career choice. *International Journal of Educational Management*, 33 (1): 28-44. https://doi.org/10.1108/ IJEM-02-2018-0049.
- 2. Al-Omari, A. A., Qablan, M. A., and Khasawneh, M. S. (2008). Faculty members' intentions to stay in Jordanian public universities. *Journal of Applied Educational Studies*, 1 (1): 26–43.
- 3. Aldosiry, N. (2020). The influence of support from administrators and other work conditions on special education teachers. *International Journal of Disability, Development and Education.* P.1–15. https://doi.org/10.1080/1034912X.2020.1837353.
- 4. Aldridge, J. M., and Fraser J. B. (2016). Teachers' view of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research*, 19 (2): 291–307. https://doi.org/10.1007/s10984-015-9198-x.
- 5. Ashiedu, J. A., and Scott-Ladd, D. B. (2012). Understanding teacher attraction and retention drivers: Addressing teacher shortages. *Australian Journal of Teacher Education*, 37 (11). http://ro.ecu.edu.au/ajte/vol37/iss11/2.
- Bettini, E., Gilmour F. A., Williams, O. T., and Billingsley, B. (2020). Predicting special and general educators' intent to continue teaching using conservation of resources theory. *Exceptional Children*, 86 (3): 310–29. https://doi.org/10.1177/0014402919870464.
- Billingsley, B., Bettini E., Mathews, M. H., and Mcleskey, J. (2020). Improving working conditions to support special educators' effectiveness: A call for leadership. *Teacher Education and Special Education*, 43 (1): 7–27. https://doi.org/10.1177/0888406419880353.

- 8. Billingsley, B., Carlson E., and Klein, S. (2004). The working conditions and induction support of early career special educators. *Exceptional Children*, 70 (3): 333–47.
- 9. Borman, G. D., and Dowling M. N. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review* of *Educational Research*, 78 (3): 367–409. https://doi.org/10.3102/0034654308321455.
- 10. Brill, S., and McCartney, A. (2008). Stopping the revolving door: Increasing teacher retention. *Politics and Policy*, 36 (5): 750–74.
- 11. Byrne, B. M. (2012). *Structural equation modelling with m plus: Basic concepts, application, and programming*. Routledge: New York, USA.
- 12. Cha, S., and Cohen-Vogel, L. (2011). Why they quit: A focused look at teachers who leave for other occupations. *School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice*, 22 (4): 371–92. https://doi.org/10.1080/09243453.2011.587437.
- Chesnut, S. R., and Cullen, A. T. (2014). Effects of self-efficacy, emotional intelligence, and perceptions of future work environment on preservice teacher commitment. *The Teacher Educator*, 49 (2): 116– 32. https://doi.org/10.1080/08878730.2014.887168.
- 14. Curry, D., Mccarragher, T., and Dellmann-Jenkins, M. (2005). Training, transfer, and turnover: Exploring the relationship among transfer of learning factors and staff retention in child welfare. *Children and Youth Services Review*, 27: 931–48. https://doi.org/10.1016/j.childyouth.2004.12.008.
- DeAngelis, K. J., and Presley, B. J. (2011). Toward a more nuanced understanding of new teacher attrition. *Education and Urban Society*, 43 (5): 598–626. https://doi.org/10.1177/0013124510380724.
- 16. Fall, A. M., and Billingsley, S. B. (2011). Disparities in work conditions among early career special educators in high- and lowpoverty districts. *Remedial and Special Education*, 32 (1): 64–78. https://doi.org/10.1177/0741932510361264.
- 17. Fullan, M. (2001). *The new meaning of educational change* (3rd Ed.). RoutledgeFlamer: London, UK.
- Geiger, T., and Pivovarova, M. (2018). The effects of working conditions on teacher retention. *Teachers and Teaching*, 24 (6): 604– 25. https://doi.org/10.1080/13540602.2018.1457524.
- 19. Geving, A. M. (2007). Identifying the types of student and teacher behaviours associated with teacher stress. *Teaching and Teacher Education*, 23: 624–40. https://doi.org/10.1016/j.tate.2007.02.006.

- Grayson, J. L., and Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, 24: 1349–63. https://doi.org/10.1016/j.tate.2007.06.005.
- 21. Hahs-Vaughn, D. L., and Scherff, L. (2008). Beginning English teacher attrition, mobility, and retention. *Journal of Experimental Education*, 77 (1): 21–54. https://doi.org/10.3200/JEXE.77.1.21-54.
- 22. Harber, C. (2017). *Schooling in Sub-Saharan Africa: Policy, practice and patterns*. Springer International Publishing AG: Gewerbestrasse, Switzerland. https://doi.org/10.1007/978-3-319-57382-3.
- 23. Holbeche, L. (2009). *Aligning human resources and business strategy*. ELSEVIER: London, Great Britain.
- 24. Hughes, G. D. (2012). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *The Journal of Educational Research*, 105 (4): 245–55. https://doi.org/10.1080/00220671.2011.584922.
- 25. Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38 (3): 499–534. http://hdl.library.upenn.edu/1017/13673.
- 26. Ingersoll, R. M., and Henry M. (2010). The magnitude, destinations, and determinants of mathematics and science teacher turnover. CPRE Research Report # RR-66. available at http://www.cpre.org. Accessed 6 may 2021.
- 27. Inman, D., and Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, 124 (4): 605–14.
- 28. Jo, S. H. (2014). Teacher commitment: Exploring associations with relationships and emotions. *Teaching and Teacher Education*, 43: 120–30. https://doi.org/10.1016/j.tate.2014.07.004.
- 29. Johnson, B., Stevens, J., and Zvoch, K. (2007). Teachers' perception of school climate: A validity study of scores from the revised school level environment questionnaire. *Educational and Psychological Measurement*, 67 (5): 833–44. https://doi.org/10.1177%2F0013164406299102.
- 30. Johnson, S. M., Kraft A. M., and Papay, P. J. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, 140 (10): 1–39.
- 31. Kelchtermans, G. (2017). Should I stay or should I go? Unpacking teacher attrition / retention as an educational issue. *Teachers and Teaching*, 23(8): 1470–1278. https://doi.org/10.1080/13540602.2017.1379793.

- 32. Kim, K., Liu, S., and Bonk, J. C. (2005). Online MBA students' perceptions of online learning: Benefits, challenges, and suggestions. *The Internet and Higher Education*, 8: 335–44. https://doi.org/10.1016/j.iheduc.2005.09.005.
- 33. Kline, R. B. (2016). *Principles and practice of structural equation modelling* (4th Ed.). The Guilford Press: New York, USA.
- 34. Kukla-Acevedo, S. (2009). Leavers, movers, and stayers: The role of workplace conditions in teacher mobility decisions. *Journal of Educational Research*, 102 (6): 443–52. https://doi.org/10.3200/JOER.102.6.443-452.
- 35. Kyndt, E., Dochy, F., Michielsen, M., and Moeyaert, B. (2009). Employee retention: Organisational and personal perspectives. *Vocations and Learning*, 2 (3): 195–215. https://doi.org/10.1007/s12186-009-9024-7.
- 36. Ladd, H. (2009). Teachers' perceptions of their working conditions: How predictive of policy-relevant outcomes? 33. Washington DC: CALDER, The Urban Institute. Available at https://files.eric.ed.gov/fulltext/ED509680.pdf. Accessed 13 August 2021.
- 37. Ladd, H. F. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? *Educational Evaluation and Policy Analysis*, 33 (2): 235–61. https://doi.org/10.3102/0162373711398128.
- Lam, B., and Yan, H. (2011). Beginning teachers' job satisfaction: The impact of school-based factors. *Teacher Development: An International Journal of Teachers' Professional Development*, 15 (3): 333–48. https://doi.org/10.1080/13664530.2011.608516.
- 39. Liu, S. (2012). The influences of school climate and teacher compensation on teachers' turnover intention in China. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 32(5): 553-569. https://doi.org/10.1080/01443410.2012.691074.
- 40. Liu, X. S., and Ramsey, J. (2008). Teachers' job satisfaction: Analyses of the teacher follow-up survey in the United States for 2000 2001. *Teaching and Teacher Education*, 24: 1173–1184. https://doi.org/10.1016/j.tate.2006.11.010.
- 41. Loeb, S., Darling-Hammond L., Luczak, J., and Luczak, J. (2005). How teaching conditions predict teacher turnover in California schools. *Peabody Journal of Education*, 80 (3): 44–70. https://doi.org/10.1207/s15327930pje8003.
- 42. Mulkeen, A., and Crowe-Taft, N. (2010). Teacher attrition in Sub-Saharan Africa: The neglected dimension of the teacher supply

challenge. A Review of Literature. UNESCO: Paris, France. https://unesdoc.unesco.org/ark:/48223/pf0000188197.

- 43. Nguyen, T. D. (2021). Linking school organizational characteristics and teacher retention: Evidence from repeated cross-sectional national data. *Teaching and Teacher Education*, 97: 1–14. https://doi.org/10.1016/j.tate.2020.103220.
- 44. Nir, A.E., and Bogler, R. (2008). The antecedents of teacher satisfaction with professional development programs. *Teaching and Teacher Education*, 24: 377–86. https://doi.org/10.1016/j.tate.2007.03.002.
- 45. Okubanjo, A. O. (2014). Organizational commitment and job satisfaction as determinant of primary school teachers' turnover intention. *Higher Education of Social Science*, 7(1): 173–179. https://doi.org/10.3968/5304
- 46. Perrachione, B. A., Rosser, J. V., and Petersen J. G. (2008). Why do they stay? Elementary teachers' perceptions of job satisfaction and retention. *Professional Educator*, 32 (2).
- 47. Roch, C. H., and Sai, N. (2018). Stay or go? Turnover in CMO, EMO and regular charter schools. *The Social Science Journal*, p. 1–13. https://doi.org/10.1016/j.soscij.2018.02.016.
- 48. Rosser, V. J. (2004). Faculty members' intentions to leave: A national study on their work life and satisfaction. *Research in Higher Education*, 45 (1): 285–309. http://dx.doi.org/10.1023/B:RIHE.0000019591.74425.f1.
- 49. Skaalvik, E. M., and Skaalvik, S. (2014). Teacher self-efficacy and perceived autonomy: Relations with teacher engagement, job satisfaction, and emotional exhaustion. *Psychological Reports: Employment Psychology & Marketing*, 114 (1): 68–77. https://doi.org/10.2466/14.02.PR0.114k14w0.
- 50. Skaalvik, E. M., and Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27 (6): 1029–38. https://doi.org/10.1016/j.tate.2011.04.001.
- 51. Smith, T. K., Connolly F., and Pryseski, C. (2014). *Positive school climate: What it looks like and how it happens*. Baltimore Education Research Consortium. Baltimore, MD.
- 52. Song, S.C., and Alpaslan, M.M. (2015). Factors impacting on teachers' job satisfaction related to science teaching: A mixed methods study. *Science Education International*, 26 (3): 358–75.
- 53. Struyven, K., and Vanthournout, G. (2014). Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to

enter the teaching profession or why those who do enter do not continue teaching. *Teaching and Teacher Education*, 43: 37–45. https://doi.org/10.1016/j.tate.2014.06.002.

- 54. Suárez, M. I., and Wright, B. K. (2019). Investigating school climate and school leadership factors that impact secondary stem teacher retention. *Journal for STEM Education Research*, 2 (1): 55–74. https://doi.org/10.1007/s41979-019-00012-z.
- 55. Swars, S. L., Meyers, B., Mays, C. L., and Lack, B. (2009). A twodimensional model of teacher retention and mobility: Classroom teachers and their university partners take a closer look at a vexing problem. *Journal of Teacher Education*, 60 (2): 168–83. https://doi.org/10.1177/0022487108329116.
- 56. Toropova, A., Myrberg, E., and Johansson, S. (2020). Teacher job satisfaction: The importance of school working conditions and teacher characteristics conditions and teacher characteristics. *Educational Review*, p. 1–27. https://doi.org/10.1080/00131911.2019.1705247.
- 57. Tourangeau, A. E. and Cranley, A. L. (2006). Nurse intention to remain employed: Understanding and strengthening determinants. *Nursing and Healthcare Management and Policy*, 55(4):497-509. https://doi.org/10.1111/j.1365-2648.2006.03934.x.
- 58. UNESCO-UIS. (2013). A teacher for every child: Projecting global teacher needs from 2015 to 2030. UIS fact sheet no. 27. UNESCO: Montreal, Canada.
- 59. Weiqi, C. (2007). The structure of secondary school teacher job satisfaction and its relationship with attrition and work enthusiasm. *Chinese Education & Society*, 40(5): 17–31. https://doi.org/10.2753/CED1061-1932400503
- 60. Wynn, S.R., Carboni W. L., and Patall, A. E. (2007). Beginning teachers' perceptions of mentoring, climate, and leadership: Promoting retention through a learning communities' perspective. *Leadership and Policy in Schools*, 6 (3): 209–29. https://doi.org/10.1080/15700760701263790.



Figure 2. A measurement model of teacher job satisfaction.

Note: Model fit: X²/df =.620, SRMR = .0043, CFI= 1.00, RMSEA=.000

Figure 3. A measurement model of intent to stay.



Note: Model fit: X2/df =1,777, SRMR = .0046, CFI= .999, RMSEA=.031



Figure 4. Results of the Structural Equation Model