

*Full Length Research Paper*

## State of academic facilities and its influence on teachers' job stress in Tamale polytechnic

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Received 08 June 2015; Accepted 18 January, 2016

This paper identifies the state of academic facilities and its influence on teachers' job stress in Tamale polytechnic. The study adopted a case study approach because it probes a specific tertiary institution in Ghana. Quantitative research method was adopted. Accidental sampling technique was used to draw sample from the population. The research used questionnaire as the main data collection instrument. Total of 114 retrieved questionnaires gave 82.6% response rate. Cronbach's Alpha and KMO was used to test sample reliability and adequacy which yielded coefficients ranging from 0.734 to 0.755. Data were analyzed using inferential statistics, with Pearson Product Moment Correlation and multiple regression models as analytical tools. Hypothesis was tested at a significant level of 0.01 and 0.05. Results revealed a significant relationship of variable for status of school facilities and teacher academic stress sources. Results of hypothesis tested show that status of school facilities influence teacher job stress significantly. It was concluded that inadequate or complete lack of academic facilities for state of the time would not only impair academic productivity, but rather exert undue stress on teachers and available facilities, and recommended that the development priorities of the institution should be staff – students oriented.

**Key words:** Academic facility, teachers, job stress, Tamale polytechnic.

### INTRODUCTION

Excellent school facilities and dedicated teachers are basic fiber upon which hangs the whole educational edifice. There is realization that the transfer of knowledge does not only take place in the four walls of the classroom from the teacher to the students, rather an overall atmosphere that guarantees effective teaching and learning processes. The condition of facilities in a learning environment determines teachers' and students' performance. This is because, if facilities are inadequate or dysfunctional, the learning process would be impaired

and academic productivity will decrease. There is enough evidence that the inadequacy of infrastructural facilities, particularly buildings, has led to unproductive learning environment in Nigeria polytechnic system (Olatunji, 2013; Adedipe, 2007; Isaiah, 2013; Akinfolarin, 2008).

The study of Owoye and Olatunde (2011) established that school facilities were the most potent determinant of academic achievement. They alluded that achievement is a function of availability of facilities to students in unity schools compared with public schools.

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Ayodele (2000) and Vandiver (2011) revealed that a positive relationship exists between availability of facilities and student academic performances. This state of affair is not different in the Ghanaian context, owing to the fact that polytechnic lecturers are expected to perform at high level in the area of curriculum without the adequate basic facilities for teaching, learning and research (Solomon et al., 2014).

For a long time, the situation has been that the staff, equipment, and other facilities including workshops and laboratories have not been sufficiently expanded to make possible the introduction of high level courses envisaged. The situation is further worsened by the fact that most of the existing items or equipment in the polytechnics were installed about 30 years ago and are now obsolete (Honyenuga, 2013).

Tamale Polytechnic (TP) is one of such institutions established under the Educational Reform Programme (EDP) and The Provisional National Defence Council (PNDC) Law 321 in 1992. One of the key weaknesses of the Polytechnic can be traced to inadequate infrastructure (Tamale Polytechnic, 2013). The polytechnic does not have enough offices and residential accommodation to cater for the numerous staff especially those in the academic division. To this end, lecturers had a difficulty handling examination scripts and other students' records, and conduct research effectively.

The available classrooms are also overstretched, owing to the fact that the institution has a teaching staff population of 229, and a student enrolment of 7,506 and per the requirements of National Council for Tertiary Education, the polytechnic will need about 375 academic staff that is 146 additional teaching staff to satisfy the ratio of 20:1 mark. This situation implies that quality teaching and learning cannot be guaranteed with a student- teacher ratio as high as 33:1 (Tamale Polytechnic, 2013). Facilities in school are needed to illustrate concepts, provide opportunity for firsthand experience, and for development of scientific attitudes and skills (Asiabaka, 2008). Their poor state or complete lack of existence would impair the teaching and learning processes, and create undue stress on available space, and eventually, the teacher.

There is little attention in the area; Academic facilities and teachers stress. This paper therefore employs vigorous statistical tools to look into the state of academic facilities and its influence on teachers' job stress in the context of Tamale Polytechnic, Ghana. In line with the study objectives, three research hypotheses were tested.

1. To explore the relationship between variables for sources of academic stress in the context of Tamale Polytechnic.

2. To determine the relationship between variables for academic facilities situation in Tamale Polytechnic.

H1: There is a statistically significant relationship between

each variable for sources of academic stressors.

H2: There is a statistically significant relationship between each variable for academic facilities.

H3: The status of academic facilities has a statistically significant effect on teacher stress.

## LITERATURE REVIEW

The realization that the transfer of knowledge does not only take place in the four walls of the classroom from the teacher to the students, rather environment that provide the platform for concept to be illustrated, firsthand experience and development of scientific attitudes, skills amidst the individual comfort (Asiabaka, 2008). There is a bank of literature on the significance of various categories of physical facilities towards the quality of education at different levels of educational system, which indeed is a plus to the teachers, and go to show the level of ingenuity and commitment of teachers towards effective delivery of lesson (Psacharopoulos, 1993; Aghenta, 1993; Adeyemi and Igbeneweke, 2000; Bandele, 2003; Adesola, 2005; Babatope, 2010).

School facilities are those things that enable the teacher to do his/her work very well and helping the learners to learn effectively that far exceeds what is possible when they are not provided (Lawanson and Gede, 2011; Peretomode, 2001). Also, school facilities are the material resources provided for staff and students to optimize their productivity in the teaching and learning process (Asiabaka, 2008). In this context, the phrase school, educational, physical, infrastructural, instructional and academic facilities are used interchangeable.

Asiabaka (2008) alluded that the school facilities consist of all types of buildings for academic and non-academic activities, equipment for academic and non-academic activities, areas for sports and games, landscape, farms and gardens including trees, roads and paths. Others include furniture and toilet facilities, lighting, acoustics, storage facilities and parking lot, security, transportation, ICT, cleaning materials, food services, and special facilities for the physically challenged persons. In the same vein, Lawanson and Gede (2011) postulated the types of facilities the school needs which includes instructional, recreational, residential and general – purpose. Fabiyi and Uzoka (2007), Ojogwu and Alutu (2009) and Olatunji (2013) alluded that for proper teaching and learning to take place, there must be adequate infrastructure and in many tertiary institutions in Nigeria, the facilities provided for most departments are grossly inadequate for lectures or practical's, some lecturers have no offices, the classroom spaces are small and do not permit meaningful interaction between the teachers and the students which makes the academic environment unhealthy, with decayed, dysfunctional, and dilapidated infrastructural facilities. In this regard, when

facilities are provided to meet relative needs of a school system, students will not only have access to the reference materials mentioned by the teacher, but individual students will also learn at their own paces (Ajayi and Ogunyemi, 1990; Ajayi, 2007; Okebukola, 2002; Adeyemo, 2010; Babatope, 2010).

Omoniyi and Ogunsanmi (2012) posited that, university lectures are expected to perform at high level in the area of curriculum without the adequate basic facilities for teaching; learning and research. Uche (2007) study of facilities in higher institutions found that the development priorities of universities and polytechnics are not staff and student oriented. Uche (2007) findings show that basic facilities of recreation and hygiene are lacking in higher institutions hence recommends that the administration of higher institutions should use their initiatives, creative minds and leadership principles to direct more attention where development is needed, most especially as it concerns students and staff development, welfare and environmental hygiene of the campus. The tertiary education is for the all round development of the recipient and when facilities in these institutions are not student-oriented, the aim is defeated. Thus, inadequacy of any category of these physical facilities could lead to overcrowding, stress, unruly behaviour, distractions and gradual decay of symbolic things that help pattern human behaviour (Hallak, 1977; Agbenta, 1993; Adeyemi and Igbineweka, 2000; Babatope, 2010).

Teacher stress is defined as unpleasant emotions experienced by a teacher such as anger and depression resulting from aspect of his work as a teacher field (Kyriacou, 2001). It is a situation which will force a person to deviate from normal functioning due to the change (that is, disrupt or enhance) in his/her psychological and/or physiological condition, such that the person is forced to deviate from normal functioning (Bhatti et al., 2011; Beehr and Newman, 1978). To Blonna (2005), stress is a holistic transaction between the individual and a stressor that results in the body's mobilization of a stress response.

Stress is part of everyday life and it arises as a result of our relationship with the constantly changing world (Rok, 2011). Stress in academic institutions can have positive and negative consequences if not properly controlled (Smith, 2002; El Shikier and Musa, 2012; Egu et al., 2014). Stress is positive when it comes in moderate amount, necessitating in stimulating and motivating alertness in order to provide the needed incentive to surmount challenges at the workplace and when stress becomes extreme and persists for a long time, it becomes negative. It can lead to feelings of worry, anxiety, anger, fear, frustration which could have a damaging effect on the individuals' health and lead to poor performance at work (Egu et al., 2014). Negative effects include reduced efficiency, decreased capacity to perform, dampened initiative and reduced interest in working, increased rigidity of thought, a lack of concern

for the organization and colleagues, and a loss of responsibility (Dua, 1994; Fairbrother and Warn, 2003).

The significant factors influencing stress among academic staff to include strike and school interruption, delay and irregular payment of salary, lack of instructional facilities, preparation of examination results, invigilation of examination, campus militancy, high cost of living, office accommodation, lack of research facilities, lack of annual leave/ holiday and underfunding of education (Ofoegbu and Nwadiani, 2006; Rutter et al., 2002; Archibong and Effiom 2010). Isaiah (2013) and Bhatti et al. (2011) identified the extent to which school facilities influence teachers' level of job dissatisfaction and their overall performance. Kennedy (2001) affirmed that the quality of school facilities is seen as an influencing factor in the decision making of the individual teachers, as to whether they stay in the profession or not. Although the importance of the facility quality has a bearing on teachers' job dissatisfaction in developed and developing countries, the quality of facility and its availability is an influencing factor to teacher job dissatisfaction (Benner, 2000; Tye and O'Brien, 2002).

State of a school is one effective predictor of student achievement and level of teacher job dissatisfaction (Isaiah, 2013). Isaiah (2013) reiterated that physical state of buildings affects the teacher's self-esteem, peer and student teacher interactions, parents' involvement, discipline, motivation and interpersonal relationships.

### Conceptual framework

Figure 1 depicts school facilities influence on teachers' job stress. According to Dejong (1997), the physical layout and design of the school could enhance certain instructional strategies, discourage others and have a significant impact on discipline. The accessibility of school facilities (for example, classroom, accommodation, libraries, laboratories, and other instructional materials) is a state not only contributes to academic achievement in the school educational system, but also a plus to teachers as it shows the level of ingenuity and commitment of teachers toward effective delivery of lesson. If the facilities are inadequate or dysfunctional, the learning process would be impaired and academic productivity will decrease. This eventually poses undue pressure, inconveniences as extra efforts is required (teaching, researching, place to ease one-self etc) by teachers. This state not only affect the teacher's self esteem, peer and student-teacher interactions, discipline, motivation and interpersonal relationships, but also influenced individual teachers decisions as whether they stay in the profession or not. This triggers teacher's job dissatisfaction, owing to the quality of facility and its availability. Increased teacher job dissatisfaction leads to teacher job stress, which eventually impedes teacher performance in both the short-run and long-run



Figure 1. School facilities influences teachers' job stress (Source: Authors' construct, May (2014)).

respectively.

**METHODOLOGY**

This paper adopted the descriptive survey approach to evaluate the state of academic facilities and its influence on teachers job stress in the context of Tamale Polytechnic. A quantitative research method was adopted. Population for the study included all academic staff (senior lecturers, lecturers, and instructors) that stood at 212, from which a sample size of 138 was determined using Sloven's (1960 cited in Slovin and Dougherty, 2004) formula for sample size determination. The research used questionnaire as the main data collection instrument, divided into 3 parts: the first part aim is to gather the socio biographic profile of respondents like sex, job grade and length of service, the second part was a six item statement intended to address teacher job stressors, while part three focuses on six issues of current academic facilities, given as a total of sixteen item, where respondents were asked to rate from 1 to 5 (for example, agree strongly, agree, no opinion, disagree, disagree strongly). The number indicated the degree to which the respondent considered how important the statements relate to status of school facilities and academic stressors in the Polytechnic.

Likert scale (1932) measurement was used to represent the point of the related responses to each item, one for each point. Respondents were sample using accidental sampling as lecturers move into Senior Common Room after lessons or to wait for lessons. Total questionnaire distributed to academic staff of the institution were 138, out of which 114 was retrieved, which gave a response rate of 82.6%. The sample reliability and adequacy test was within the range of 0.73 to 0.75. Cronbach's Alpha and KMO test for estimating the reliability was adapted (Table 1 to 3). To arrive at the exact analysis and interpretation the authors used correlation matrix as the statistical technique for the data presentation to achieve the research objective 1, 2 and Hypotheses (H1&H2) respectively, while multiple regression analyses and coefficient of determination addressed hypotheses (H3). Data analysis and presentation was however handled quantitatively.

**RESULTS**

**Research objective 1: To explore the relationship between variables for sources of academic stress in Tamale Polytechnic**

Correlation analysis was performed to find out the pair wise relationship between variables: Lack of Research Facility (LRF), Lack of Instructional Facility (LIF), Lack of Office Accommodation (LOA), Funds for Career Development (FCD), Publication for Promotion (PP), and Delay and Irregular Payment of Claims (DIPC) as source

Table 1. Reliability Statistics (Reliability test for sources of academic stress in Tamale Polytechnic).

Cronbach's alpha	No. of Items
0.734	6

Table 2. KMO and Bartlett's test (Reliability test for current academic facilities in Tamale Polytechnic).

Kaiser-Meyer-Olkin measure of sampling adequacy		0.745
Bartlett's test of sphericity	Approx. Chi-square	151.605
	Df	15
	Sig.	0.000

Table 3. Reliability statistics (Reliability test for academic facilities influence on teacher stress in Tamale Polytechnic).

Cronbach's alpha	No. of Items
0.755	7

of teacher stress in Tamale Polytechnic. Hence, the results are summarized in Table 4. The correlation analysis as shown in Table 4 depicts the information on relationship among variables constituting source of teacher stress under study. It is reported that Lack of Research Facility (LRF) exhibited positive and significant correlation with LIF ( $r = 0.594, P < 0.01$ ), LOA ( $r = .463, P < 0.01$ ), FCD ( $r = .420, P < 0.01$ ), PP ( $r = .230, P < 0.01$ ) and DIPC ( $r = .284, P < 0.01$ ). Similarly, lack of instructional facility was positively significantly correlated with lack of office accommodation, funds for career development and delay and irregular payment of claims. Also LOA displayed positive and significant positive relationship with FCD, while FCD was positively and significantly correlated with PP, the relationship between PP and DIPC was equally positive and statistically significant. It can be inferred that, source of teacher stress in Tamale polytechnic is endorsed, and perceptible to the

**Table 4.** Correlation matrixes of interrelations of variables of teachers stress sources.

S/N	Variable	Hh9	2	3	4	5	6
1	Lack of research facility (LRF)	1	-	-	-	-	-
2	Lack of instructional facility (LIF)	0.594**	1	-	-	-	-
3	Lack of office accommodation (LOA)	0.463**	0.351**	1	-	-	-
4	Funds for career development (FCD)	0.420**	0.324**	0.474**	1	-	-
5	Publication for promotion (PP)	0.230*	0.153	0.103	0.303**	1	-
6	Delay and irregular payment of claims (DIPC)	0.284**	0.285**	0.157	0.166	0.316**	1

\*\* P <0.01.\*P < 0.05.

**Table 5.** Correlation matrix of interrelations of six variables for status of academic facilities.

S/N	Variables	1	2	3	4	5	6
1	Enough Classrooms in School (ECS)	1	-	-	-	-	-
2	Well Resource Instructional learning material (WRILM)	0.468**	1	-	-	-	-
3	Enough Offices for Academic Staff (EOAS)	0.259**	0.276**	1	-	-	-
4	Well Equip Laboratories (WELs)	0.184	0.327**	0.385**	1	-	-
5	Well Equip Library (WEL)	0.235*	0.338**	0.391**	0.317**	1	-
6	Enough Sanitary Facility (ESF)	0.321**	0.629**	0.328**	0.282**	0.430**	1

\*\* P < 0.01. \* P < 0.05.

status of school facilities.

**Research objective 2: To determine the relationship between variables for academic facilities situation in Tamale Polytechnic**

Table 5 presents correlation matrix analysis among six controlling variables (ECS, WRILM, EOAS, WELs, WEL and ESF) of academic facilities status in Tamale Polytechnic. From table 5, ECS exhibited positive and significant correlation with WRILM (r = .468, P <0.01), EOAS(r = .259, P <0.01), WELs(r = .184, P <0.01), WEL (r = .235, P <0.01) and ESF (r = .321, P <0.01). Similarly, WRILM was positive and statistical significant with EOAS (r = .276, P <0.01), WELs (r = .327, P <0.01), WEL (r = .338, P <0.01) and ESF (r = .629, P <0.01). Also EOA displayed significant positive relationship with WELs (r = .385, P <0.01), WEL (r = .391, P <0.01) and ESF (r = .328, P <0.01).While WELs was positively and significantly correlated with WEL (r = .317, P <0.01) and ESF (r = .282, P <0.01), correlation between WEL and ESF (r = .430, P <0.01) was positively and significantly correlated with WEL (r = .284, P <0.01) and ESF (r = .284, P <0.01), correlation between WEL and ESF (r = .284, P <0.01) was positive and statistically significant. Meanwhile, correlation between ECS and WEL was unrelated. It can be inferred that with high rates of inadequacy in academic facilities, effective academic achievement cannot be guaranteed. Hence, H2, accepted.

H3: The status of academic facilities have a statistically significant effect on teacher stress in Tamale Polytechnic.

Multiple regression analysis was performed to test formulated hypothesis (Table 6). The estimation process was based on ordinary least squares (OLS) [that is,  $Y = B_0 + B_i X_i$ ]. For this purpose, the study consider the following model specifications by making Y as a dependent variable (that is, teacher stress), whiles  $X_i$ , the controlling variables for state of academic facility, as independent variable. In the study model, “ $B_0$ ” and “ $B_i$ ” are constant. “ $B_i$ ” is the unit contribution of “ $X_i$ ” to Y for every unit increase in “ $X_i$ ”. “ $B_0$ ” is the value of Y when “ $X_i$ ” is zero. Therefore, the basic model for the study was as follows:

$$Y = B_0 + \beta_i X_i + e$$

Where, Y = Response variable

$X_i$ = Independent variables.

$B_i$  = model constants

$i = 1, 2, \dots n$

e = random error

Dependent variable: Teacher stress,  $R^2 = 47\%$ ,  $F=8.652$ -statistically significant

$$TS = \beta_0 + \beta_1(ECS) + \beta_2(WRILM) + \beta_3(EOAS) + \beta_4(WELs) + \beta_5(WEL) + \beta_6(ESF) + e \dots \dots \text{Model (1)}$$

Where:  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  and  $\beta_6$  are the regression

**Table 6.** Summary of the multiple regression model for hypothesis three: State of academic facility and teacher stress.

Model	Unstandardized coefficients		Standardized Coefficients	t	Sig.
	B	Std. error	Beta		
Constant	1.215	0.827	-	1.469	0.145
Enough classrooms in the school	0.953	0.133	0.265	7.172	0.000
Well resource instructional learning materials	0.952	0.176	0.243	5.417	0.000
Enough offices for academic staff	0.886	0.185	0.180	4.799	0.000
Well equip laboratories	0.985	0.153	0.238	6.424	0.000
Well equip library	0.887	0.153	0.222	5.810	0.000
Enough sanitary facilities	0.995	0.169	0.255	5.882	0.000

coefficient;

X1 = ECS: Enough classrooms in school

X2 = WRILM: Well resource instructional learning material

X3 = EOAS: Enough offices for academic staff

X4 = WELs: Well equip laboratories

X5 = WEL: Well equip library

X6 = ESF: Enough sanitary facility

e: error term.

Table 6 reveals that the model has statistically significant F-ratio (8.652) and possesses with a moderate coefficient of determination ( $R^2=0.473$ ), implying that only approximately 47% of the variation in teacher stress is explained by the six independent variables in this model. It is further evident that the beta coefficients for each of the six school facilities constructs is significant predictors of overall teacher job stress (for example,  $\beta = .265$ ;  $\beta = .243$ ;  $\beta = .180$ ;  $\beta = .238$ ;  $\beta = .222$ ;  $\beta = .255$ ;  $p = 0.000$ ) in this model. It can be inferred that the effect of facilities status on teacher stress is positive and statistically significant. This does not only threaten the health and wellbeing of teachers, but academic work achievement of the teacher in the context of Tamale Polytechnic.

## DISCUSSION

The study is focused on an assessment of academic facility status and teacher stress in the context of Tamale Polytechnic in Ghana. The results of the correlation analysis involving all indicators of source of teacher stress exhibited positive correlation coefficient values. This is in line with Archibong and Effiom (2010), Ofoegbu and Nwadiani (2006) and Rutter et al. (2002) studies that the significant factors of stress among academic staff to include delay and irregular payment of salary, lack of instructional facilities, preparation of examination results, invigilation of examination, office accommodation, lack of research facilities, poorly equipped laboratories technical workshops and library and lack of sanitary facilities.

Similarly, the findings indicate that status of academic facilities is found to have significant positive relationship

with academic achievement is in agreement with Lawanson and Gede (2011), Owoeye and Olatunde (2011), Vandiver (2011), Abraham (2003) and Ayodele (2000) that positive relationship exists between availability of facilities, student and teacher academic achievement. They alluded further that the type of atmosphere required for effective learning is that consisting of a better school building and better academic facilities.

The results from the multiple regression analysis (MRA) recorded the effects of items of school facilities status on teacher stress. The six constructs of academic facility status: classrooms in the school ( $\beta = .265$ ,  $P = 0.000$ ), enough sanitary facilities ( $\beta = .255$ ,  $P = 0.000$ ), well resource instructional learning material ( $\beta = .243$ ,  $P = 0.000$ ), well equip laboratories ( $\beta = .222$ ,  $P = 0.000$ ), well equip library ( $\beta = .238$ ,  $P = 0.000$ ), and enough offices for academic staff ( $\beta = .180$ ,  $P = 0.000$ ) exhibited statistically significant positive effect on teacher stress and collectively explained 47% in prediction. The result provided support for the H3 test result which indicated that the status of academic facilities has a statistically significant effect on teacher stress. This evidence is in agreement with findings of Uche (2007), Hallak (1977), Agbenta (1993), Adeyemi and Igbineweka (2000) and Babatope (2010). They emphasized that, inadequacy of any category of physical facilities could lead to overcrowding, stress, unruly behaviour, distractions and gradual decay of symbolic things that help pattern human behaviour. This implies that effective teaching and learning process cannot be guarantee amidst inadequate facilities in school, and eventually affects teacher job stress. Result of the model reveals further that, enough classroom in school the and sanitary facilities has moderate effect and highest contributors to teacher job stress in the context of Tamale Polytechnic is in consonance with the views of Uche (2007), Olatunji (2013), Uzoka and Fabiyi (2007), that the development priorities of universities and polytechnics are not staff and student oriented. They alluded that basic facilities of recreation and hygiene are lacking in higher institutions, and recommends that administration of higher institutions

direct attention to environmental hygiene of the campus, as it concerns students and staff development, welfare and health.

## CONCLUSION AND RECOMMENDATION

It is concluded based on the findings that teacher academic achievement has positive significant relationship with state of academic facilities and job stress. This is because; direct relevance to the inadequacy or lack thereof of physical facilities and overall atmosphere would impair teacher academic productivity. Since teachers are expected to deliver without recourse to their comfort, safety and health, they end up being stressful, owing to status of school facilities, as it influences teacher job stress tremendously. It is recommended that the development priorities of the institution should be staff – students oriented.

## MANAGERIAL IMPLEMENTATION

Although the present study was confined to identify the status of academic facilities and its influence on teachers job stress, it is appropriate to state briefly the managerial implication for the study. In this context, the following policy actions may be considered worthwhile.

1. Insufficient sanitary facilities (toilets, washrooms) in school poses undue stress to staff and students, and should be addressed as a matter of urgency.
2. Construction of lecture halls should be spacious and dual-purpose buildings to accommodate possible increased students' enrollment and new programmes.
3. Construction of libraries, workshops and laboratories should reflect state of the time sort.
4. Staff accommodation (offices) should be addressed as this affect teacher conduct for research and ingenuity.

## LIMITATION AND DIRECTION FOR FUTURE RESEARCH

The specific characteristics of the examined organization may limit the external validity of the findings. The study utilized data specific to teachers of Tamale Polytechnic and thus cannot be generalized to other industries. Also, due to the small sample size used for this study, results may not be generalized beyond the specific population from which the sample was drawn. Further studies should widen the scope to cover teachers and administrators across the polytechnic and beyond. This would increase the sample size and make the research more representatives for external validity. More researches should be focused on factor analysis of academic facility influence on teacher stress, model effect of academic

## Conflict of interests

The authors have not declared any conflict of interests.

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