Practices, Personal and School Factors That Influenced School Heads' Job Stress and Satisfaction

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Abstract: This study examined the influence of personal factors, school factors and practices performed on job stress and satisfaction. Quantitative research design and purposeful sampling method were employed to sample school heads from senior high schools. Data was collected using a self-reported survey questionnaire and was analysed using exploratory, confirmatory and regression analysis to explore the relationships. In the results, a high proportion of school heads are satisfied but feel stressed about their job and age, type of school, experience, position and practices performed, had a varied influence on job stress and job satisfaction. The authors advised on building the capacity of school heads in improving their health and performance.

Keywords: School heads, job stress, practices, personal factors, school factors.


Introduction

Over the years, job demands of school heads (both heads and deputies) have been changing to meet societal needs, but factors related to their health and satisfaction to ensure continuous provision of quality education delivery had not received due research recognition (Dadaczynski & Paulus, 2015; Wallace Foundation, 2013). School heads, like teachers, have a valuable place in the success of any educational setup (Tindowen, 2019). In assessing educational systems, school heads ensure and enhance the provision of quality teaching and learning (Huber, 2016; Konan, 2016) resulting in students' improved learning outcomes and teachers' strengthening the professional community (Wahlstrom et al., 2010).

School heads also drive the vision of schools. They shape the vision of academic success for all students; promote high standards; create a conducive and hospitable climate for academic exercise to progress orderly and safely, resulting in the development of a cooperative spirit among teachers for fruitful interaction (Wallace Foundation, 2013).

School heads also implement reforms introduced at the school level (Denecker, 2019). Recently, on the educational front in Ghana, the study context had witnessed some policy changes that redefined the practices of school heads and presented heads with new challenges. Notable among the policy reforms is the introduction of the Free Senior High School Programme (FSHSP), which increased enrolment by about 31 per cent from 361,771 (2017 year) to 472,730 (2018 year) (Addae et al., 2019). However, available classroom space could not contain the increased numbers, and teaching staff were inadequate. Consequently, the government introduced a "double-track" system (shift system) and recruited nonprofessional teachers to augment the number of professional teachers whose workload had increased.

Prior studies varied regarding the impact of these challenges on job stress and satisfaction of school heads in the decentralised education system. The adoption of policies imposed on school heads by school districts in Canada, for example, resulted in school heads experiencing less job satisfaction (Wang et al., 2018). The result, affirming Sweeney's (2011) finding, indicated that the reforms negatively affected school heads’ and teachers’ roles. Relatedly, personal, and school factors influence stress and satisfaction levels of school heads. Darmody and Smyth (2016) said stress levels did not vary by gender but by age, and that satisfaction increased with experience and did not vary by gender.

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Similarly, Borg and Riding (1991), Anastasiou and Papakonstantinou (2014), Dadaczynski and Paulus (2016) and Juma and Simatwa (2016). Though significant strides were made in investigating the phenomenon stress in education worldwide (see Boyland, 2011; Chandler, 2001; Darmody & Synth, 2016; Gmelch & Gates, 1998; Poirel et al., 2012; Wang et al., 2018) much research was not conducted on the subject in the study context. This study, therefore, examined these factors to contribute to knowledge as well as influence policy formulation on human resource management in the education subsector. The following research questions guided the current study:

1. Which personal (age, gender, position) and school factors (the type of school, classification of school, and tracking type) influence practices performed by school heads, job stress and job satisfaction?

2. Is there a relationship among practices performed by school leaders, job stress and job satisfaction of school heads?

This study, used regression analytical tool to examine the influence of personal factors such as gender, age, position, and school factors like the type of school, tracking type, school classification on practices performed, job stress and job satisfaction of school heads and the relationship among job stress, job satisfaction and practices performed.

Theoretical Background

Some theories explained the phenomenon of job stress in work psychology literature. These theories include person-environment (P-E) fit (Dewe, O’Driscoll & Cooper, 2012); the transactional model of stress (Lazarus & Folkman, 1984) and others (see Cavanaugh et al., 2000; Demerouti et al., 2001). According to P-E fit, experiencing stress is a product of interaction with the work environment. Consequently, when the job demand exceeds the individual's abilities or resources to cope, then job stress results. Regarding the transactional model of stress, job stress is dependent on the outcome of cognitive appraisal of ongoing events experienced by individuals (Lazarus & Folkman, 1984). When the issue is threatening, a feeling of stress results, and when it is not, no stress results. Stress most often is exhibited in behaviour. Individuals display negative emotions like anger, anxiety and tension, among others (Kyriacou, 2001), which have consequences for performance at the workplace and schools in particular (Darmody & Smyth, 2016).

Literature Review

Job satisfaction

Positive and negative feelings of individuals about their job define the level of job satisfaction (Wang et al., 2018), which has a link with job stress and performance. School heads perform complex tasks in their quest to improve the quality of teaching and learning. The complexity of duties performed (Wallace Foundation, 2013) and the resulting stress were depressive (Wei et al., 2014) and affect the satisfaction level to perform (Darmody & Smyth, 2016).

Earlier reports had established a positive relationship between job satisfaction and performance (Judge et al., 2001); however, job dissatisfaction had also affected the performance of school heads and others related to them (Sigrist, 2010). Prior research attempted to identify factors that influenced the satisfaction level among school heads. Personal variables like age, gender and experience (Darmody & Smyth, 2016; Sodoma & Else, 2009) and workload (Bauer & Brazer, 2013; Chang et al., 2015; Pollock et al., 2014) had a varied influence on job satisfaction. Also, the rising job demands and job expectations had consequences for job stress (Chang, Leach & Anderman, 2015) and significantly influenced the health and wellbeing of school heads (Darmody & Smyth, 2016; Pollock et al., 2014).

Job stress

In schools and among school heads, in particular, the impact of job stress has been reported to be a regular phenomenon (Wells, 2016). Riley (2018), studied health and wellbeing among Australian school heads and reported moderate to high levels of stress. Riley (2018), compared the stress level of school heads and the general public in Australia. The results showed that school heads suffer more stress than the general public in discharging their functions. In Canada for example, a study of principals and vice-principals of elementary and high schools in Quebec, using the Administrative Stress Index (Torelli & Gmelch, 1993), attributed the high level of stress among principals to administrative constraints rather than role expectations, interpersonal relationship, intrapersonal conflict and reform constraints (Poirel et al., 2012).

Research also touched on contributions of personal and school factors on job stress and satisfaction. Age, gender and years of experience as school head, type of school and location of the school have varied effects on job satisfaction and job stress. Dadaczynski and Paulus (2016), for example, stated that there was a significant difference in job stress of school heads concerning their age and type of school. Specifically, the study reported that younger school heads suffer more job stress than older ones.

In investigating the impact of demographic and school factors on job stress and satisfaction in Ireland’s school principals, Darmody and Smyth (2016), found that age, experience and the level of administrative support enjoyed by
school heads had a different effect. There was a higher stress level among school heads age over 40 years, and for those just offered the job, contrary to Dadaczynski and Paulus (2016).

**Practices**

School heads perform practices expected to enhance the promotion of teaching and learning outcomes (Organisation for Economic Co-operation and Development [OECD], 2008). In addition to supervising teachers, school heads provided educational guidance to students (LePage et al., 2005; Simonsen et al., 2008) to support them in handling challenges that might influence their academic progress. Above all, they must be accountable to stakeholders, sharing information with parents and communicating the school’s vision (Georgia Leadership Institute for School Improvement [GLISI], 2014) and building a professional community suitable for academic work.

School heads’ practices were not established (Huber, 2004); however, what was sure was the evolution and complexity of duties performed as school heads (Blasé et al., 2010) and the stressfulness of performing the tasks (Mbibi & Oluchi, 2013; Steward, 2014; Wadesango et al., 2015; Yambo et al., 2014).

The findings of these papers in different research settings blamed the incidence of job stress in performing practices on workload and time pressure, which caused some school heads to be selective about practices to perform (Huber et al., 2017). Nevertheless, in terms of job satisfaction, a positive relationship had long been reported with performance (Judge et al., 2001). Therefore, the researchers hypothesised that there would be a relationship among job stress, job satisfaction and practices performed by school heads. They also hypothesised that personal and school factors influence job satisfaction, job stress and practices performed by school heads. Figure 1 shows the hypothesised model.

In this study, the researchers examined the influence of personal and school factors on practices performed, job stress and satisfaction on the one hand and the interrelationship among practices performed, job stress and satisfaction. The findings will add to knowledge on the literature on school management and administration, highlighting the context of centralised school systems, and inform policy formulation at the local level and in similar educational cultures.

![Figure 1: The hypothesised model showing the relationships (Institute for the Management and Economics of Education [IBB] at the University of Teacher Education Zug [PH Zug], 2019)](image)

**Ghana: Secondary Education Management**

Management of education in Ghana is hierarchical. At the national level, political responsibility for education lies with the Ministry of Education (MoE) with obligations for general supervision and formulation of educational policies. One agency that implements policies for Primary and Secondary level education is the Ghana Education Service (G.E.S.). The G.E.S. has the mandate to ensure the provision of education to all children of school-going age at the pre-tertiary level without any form of discrimination. Pre – Tertiary level education is two years of Kindergarten, six years of primary, three years of Junior High school and three years of Secondary level education – Senior High School (S.H.S.) or Technical and Vocational Education and Training – TVET). At the S.H.S. and TVET levels, leadership comprises of a Head and two to three deputies (depending on the school type and enrolment).

Regarding the exercise of power, school leaders cannot recruit, pay salaries, or dismiss staff based on non – performance or misconduct. Decision making is, primarily influenced by the G.E.S., the school board, and to a limited extent, the parents’ teacher association of the school or school management committee at the primary school level.

Lastly, while school leadership preparation is necessary (Mourshed et al., 2010) just as research underscoring the importance of pre-service training for School leaders (Grogan & Andrews, 2002; Kitavi & Westhuizen, 1997) the case of the study context is different. There is no recognised pre-service training for school leaders as in some jurisdiction (see Huber, 2016). School leaders are appointed based on academic qualification, career level (minimum being Assistant Director I) and passing a selection interview. Appointment (head or assistant) to a school is termless unless the appointment is terminated or the individual is transferred to another school with the same portfolio or higher depending on the rank attained until retirement.
Methodology

Researchers used various strategies to study the phenomenon of job stress and related variables among school principals. Similar studies by Huber et al. (2017), Kusi et al. (2014) and Steward (2014), for example, used mixed methods. Staufler and Mason (2013) used the qualitative design method, while Klocko and Wells (2015), Wadesango et al. (2015) and Heidmets and Liik (2014) followed quantitative design methods. Like the latter studies, this study used a quantitative self-report survey method to understand the predictive relationship (Best, 1970) between personal and school factors (independent variables) and practices, job stress and job satisfaction (dependent variables) among school leaders.

In the sample were 195 school heads (heads [26.2%] and deputies [73.8%]) from 145 senior high schools who consented and participated in the study. Out of a total of 291 participants contacted, 195 responded, giving a response rate of 67 per cent. The authors collected data during the summer of 2019 from purposively selected S.H.S.s. School factors (the type of school, tracking system [single and double], and school classification) and personal factors (gender, position) are categorical variables and age as a continuous variable. The sample had the following characteristics: age (mean = 49.6 years, modal age = 49 years), work experience as heads (mean = 4.2 years, SD = 3.6 years, mode = 2 years, max=28 years) and gender (male = 79 percent, female = 21 percent).

Data analyses were in two steps. First, the scales were analysed using exploratory factor analysis (principal component analysis with Oblimin with Kaiser normalisation rotation), consistency analyses (Cronbach’s alpha) and fit indices computed. Then regression coefficients were calculated to examine the relationship among the variables in the second step (Dick & Wagner, 2001).

The study used three instruments: the job stress scale by Parker and DeCotiis (1983), the job satisfaction and wellbeing scale (Wang et al., 2018) and school heads’ practices scale (Huber et al. (2013) as cited in Huber et al., 2017; Kukemelk & Mikk, 2015). Time pressure accounted for school heads’ inability to handle functions demanded of them, resulting in high job stress (Kocko & Wells, 2015). In measuring job stress, therefore, the 8-time stress items by Parker and DeCotiis (1983) was administered. The scale scored on 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree with high scores representing a high level of stress. Next, confirmatory factor analysis conducted to find out if the eight items measured job stress resulting from time pressure. The result revealed six items with the following fit indices: $X^2/df = 1.3$, RMSEA = .04, CFI = .99, TLI = .99 and SRMR = .03 given the benchmark values as: $X^2/df ≤ 3$ (Schreiber et al., 2006), RMSEA ≤ .06, CFI ≥ .95, TLI ≥.95 and SRMR < .08 (Hu & Bentler, 1999, Steiger, 2007). Cronbach’s alpha value of scale reported a value of .85 (Griethuijsen et al., 2014).

Job satisfaction and wellbeing were measured by Wang et al. (2018) with 20 items on a 5-point Likert. The authors performed Exploratory factor analysis using a principal axis factoring extraction method and Oblimin with Kaiser normalisation rotation. The analysis revealed two factors with loadings below 0.50 deleted. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.7 and Bartlett’s test of sphericity was significant ($p = 0.000$) showing that the correlation matrix was significantly different from the identity matrix and therefore factorable (Hauben et al., 2017). The factors, job satisfaction (5-items) and wellbeing (4-items) reported Cronbach’s alpha value of .71 and .61, respectively. Next, how well the model fits the sample data was determined (McDonald & Ho, 2002). The results obtained from the confirmatory factor analysis (CFA) showed fit indices as $X^2/df = 1.86$, CFI = .91, TLI = .90, RMSEA = .07 and SRMR = .07, indicating approximate fit (Asparouhov & Mathen, 2018; Steiger, 2007). The authors used these items for further analyses.

Finally, practices performed by the school heads were measured. The scale was an adapted version of the instrument measuring school heads’ practices pioneered by Huber et al. (2013) and Kukemelk and Mikk. The scale scored on a 5-point Likert scale from 1 = Never Performed to 5 = Always Performed with high scores indicating a higher rate of performing such practices. Exploratory factor analyses revealed 22 items with significant loadings. The model showed approximate fit indices: $X^2/df = 1.82$, RMSEA = 0.07, CFI = 0.90 TLI = 0.90 and SRMR = 0.06 showing the model fit the data significantly (Asparouhov & Mathen, 2018; Steiger, 2007) with high Cronbach’s alpha value as $\alpha = 0.91$ conforming to the ideal value of $\alpha =.7$ (Griethuijsen et al., 2014).

Findings

Before, the regression analysis, the authors performed cross-tabulation of levels of stress, satisfaction, and practices. The levels of job stress (not stressed, moderately stressed and stressed), job satisfaction (not satisfied, moderately satisfied and satisfied) and practices (seldom/sometimes performed, often/always performed) were cross-tabulated to determine the proportion in each category. A small percentage of heads reported stressed but not satisfied, seldom/sometimes preformed, but not stressed and seldom/sometimes performed but not satisfied. However, a higher proportion of school heads reported stressed but satisfied with their job. Also, a higher percentage of school heads that often/always performed practices were stressed. Similarly, over 50 per cent of school heads that often/always perform practices were satisfied with their job, and an additional 21.1 per cent were moderately satisfied. See Table 1.
Regression analysis was used to investigate the influence of personal and school factors on practices performed, job stress and satisfaction among school heads. In the final models, only the significant variables were included in the model. In interpreting the model, positive coefficient means the variables were associated with a high feeling of stress, satisfaction and higher performance of practices. In contrast, negative coefficient means the variables were associated with a low feeling of stress, satisfaction and lower performance of practices.

The specific levels of stress, satisfaction and performance of practices were also assessed. The result (see appendix 1) showed that 66.7 per cent of school heads were stressed, while a further 24.6 per cent were moderately stressed. Less than 10 per cent of the sample was not stressed. Relatedly, there was a higher level of job satisfaction. The majority were satisfied with about 28 per cent being moderately satisfied with an insignificant number being not satisfied. Lastly, the result showed a more significant proportion of school heads in the category of “often/always performed” practices. See appendix 1.

R.Q. 1: Which personal and school factors influence practices performed, job stress and job satisfaction of school heads?

The analysis of the data revealed the significant variables that influenced practices performed, job stress and satisfaction among school heads. Practices performed were influenced by position. Type of school, age, and classification of school (category of school) influenced job stress level while age and position significantly had an impact on job satisfaction. As shown in Table 2, job stress was lower for older school heads ($\beta = -0.23, p<0.01$), implying younger school heads get more stressed in performing duties. Also, school heads in boarding schools experience a higher stress level than day school heads as a change in the status (from day to boarding) was associated with higher stress level ($\beta = 0.24, p<0.01$). Also, heads in schools classified in higher category schools’ ranking were reported to experience a higher level of job stress ($\beta = 0.16, p<0.05$) than heads in lower-ranked schools.

In the job satisfaction model, older school heads were less satisfied with their job ($\beta = -0.15, p<0.05$), as an increase in age reduced the level of satisfaction in performing practices. Also, the result showed that position (as head or deputy head) had an impact on job satisfaction level. Deputies were more satisfied with their duties than substantive heads ($\beta = -0.17, p<0.05$), as a change in position (from deputy head to head) reduced satisfaction derived from performing practices.

Considering factors that influence the performance of practices, the result revealed position significantly predicted performance of practices. Performing practices were unequal between heads and deputies. The result showed a rise in position from deputy head to head reduced the level of performing practices ($\beta = -0.25, p<0.001$). It implied that deputies perform practices more (often/always) than their substantive heads.

### Table 2: The final model showing significant effects

<table>
<thead>
<tr>
<th></th>
<th>Practices $\beta$</th>
<th>Job Stress $\beta$</th>
<th>Job Satisfaction $\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>-0.25***</td>
<td>-</td>
<td>-0.17*</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>-0.23**</td>
<td>-0.15*</td>
</tr>
<tr>
<td>Type of School</td>
<td>-</td>
<td>0.24**</td>
<td>-</td>
</tr>
<tr>
<td>School Category</td>
<td>-</td>
<td>0.16*</td>
<td>-</td>
</tr>
<tr>
<td>R²</td>
<td>0.07</td>
<td>0.13</td>
<td>0.04</td>
</tr>
<tr>
<td>Adj.R²</td>
<td>0.06</td>
<td>0.11</td>
<td>0.03</td>
</tr>
</tbody>
</table>

***p<.001, **p<.01, * p<.05. Note: Standardized beta values are presented
RQ2: Is there a relationship among job satisfaction, job stress and practices performed by school heads?

The authors also examined the relationship among the dependent variables (practices, job stress and job satisfaction) in the model. The result reported a significant positive association between practices performed and job satisfaction ($\beta = 0.27$, $p<0.001$). This relationship implied that as school heads perform practices often/always, the level of satisfaction derived from performing such practices increases.

Therefore, the final model confirmed the influence of some personal school factors on job satisfaction, job stress and practices. Experience, position and age influenced job satisfaction, while age influenced job stress. The analysis confirmed that school factors and the type of school influenced job stress and practices. Lastly, the hypothesis confirmed that practices influence job satisfaction in the model. See Figure 2.

![Figure 2: The confirmed model showing the significant factors and the relationships](image)

**Discussion**

As in other contexts, there is still enough to understand about the daily practices and the phenomenon of job stress and resilience of school leaders (Levin, 2011). Researchers have examined job stress and satisfaction at different levels of education - the primary level (Chaplain, 1995a; Ullrich, 2012) and secondary level (Ahghar, 2008; Sheffield et al., 1994) for example. Consistent with the times, there had been changes in education systems, policies and the demand on school heads. Nevertheless, the examination of job stress and how resilient school heads were to withstand the effects of stress had not been adequately studied, especially in the context of Ghana and for that matter Africa in general.

Studies elsewhere, for example, Bauer and Brazer (2013), Darmody and Smyth (2016), Juma and Simatwa (2016), Denecker (2019) revealed how demanding, complicated, stressful and satisfying school leaders were in preforming duties. In these studies, job stress was considered a function of workload and time pressure without reporting the specific practices that accounted for the workload for which reason there was not enough time to perform and hence causing stress. In this study, practices of school heads and job stress were measured together with job satisfaction to assess the predictive values of personal and school factors. The following paragraphs discussed the findings.

First was the assessment of variables predicting job stress. Prior surveys elsewhere reported that school heads perceived their duties as stressful. The findings of Chaplain (2001), Steward (2014) and recently, Denecker (2019) indicated a high level of stress among school heads. Over half of the sample in that study reported very or extreme level of stress with a further 40 per cent indicating a moderate level of stress (Chaplain, 2001; Denecker, 2019). The present result confirmed these reports, as more than 50 per cent of the sample reported being stressed, with a sizable number reporting being moderately stressed. Also, job stress was lower for older school heads, thus confirming the result of Dadaczynski and Paulus (2016) but not supported by the conclusion of Darmody and Smyth (2016) that stress was higher for older principals. The higher level of job stress among young heads (most of whom are assistants) could be attributed to the higher level of performing practices. Practices related to the preparation of teaching time table, monitoring of students’ class attendance and assessment, providing guidance and counselling services and representing the head at some internal school events (e.g. cultural and sports festivals) and maintaining discipline among students are some duties that engage the attention of deputy heads. In contrast, the heads have
Another interesting finding was the revelation that school heads in boarding schools experience higher stress level than their counterparts in day schools. In Ghana, boarding schools have a higher enrolment of students and a higher rate of students' indiscipline. It also has a higher number of teaching and non-teaching staff with higher supervisory and administrative duty demands on school head’s time than heads in day schools. The result was therefore not surprising, as duties performed were one of the factors reported in the literature to have an impact on the stress level of school heads. See Alasomukai (2019), Wang et al. (2018), Riley (2018), and Darmody and Smyth (2016). Also, the undisciplined behaviour of students in boarding schools—drug use, alcoholism, agitation against low-quality food, among others. (Salifu & Agbenyega, 2012) tends to increase the stress level of heads.

Consequently, the type of school in this context and elsewhere had a significant impact on job stress of school leaders (Dadaczynski & Paulus, 2016), as they spent more time enforcing the code of conduct of the school. Related to the type of school is the classification of the schools. Senior high schools in Ghana are in categories. The quality and quantity of school infrastructure, quality of staff, academic performance, number of students enrolled yearly are among the key considerations that determine the classification of a school. Consequently, stakeholders demand the best outcome from schools with the best facilities than schools lowly classified. So, the finding that school classification had a positive impact on the job stress level of heads was revealing as reported for heads managing boarding schools.

Secondly, in the job satisfaction model, age, position, experience, and practices had a significant effect. The study reported a high level of job satisfaction within the sample, which confirmed findings by Chaplain (2001), Darmody and Smyth (2016) and Wang et al. (2018). Also, the study found that older school heads were less satisfied and those with long years of experience were more satisfied than those with less experience. These findings partially support the result of Chaplain (2001) that job satisfaction among school heads varies depending on work experience, age and gender but did not support the fact that new school heads experienced higher satisfaction levels (Darmody & Smyth, 2016). Also, this finding indicates that school heads appraised the stressful nature of the practices performed and appropriately applied coping strategies to lessen the impact of stress they might have experienced hence, the reported high level of satisfaction (Lazarus & Folkman, 1984). Two variables influenced the job satisfaction level of school heads—position (as head or deputy head) and age. The satisfaction level was higher among deputy heads and increased level of performing practices resulted in high satisfaction. One plausible reason behind this result could be the desire of deputy heads to remain in the good books of their heads, as most hardworking support staffs earn a positive recommendation for promotion to be substantive heads from the head. Also, deputy heads have fewer community engagements and travel less to represent the school at stakeholder engagements; as such, they have enough time to remain in the school to perform practices, unlike the head.

Performing of practices was higher among deputy heads (position) and school heads in boarding schools (school type). A higher percentage reportedly often/always performed practices, suggesting that the likelihood of avoiding some practices was rare. It did not support the assertion by Huber et al. (2017). It was also informative to note that a rise in position from deputy head to head reduces the level of performing practices. It is plausible because of the administrative setup of the education system. School administration is top-down with ultimate power at school level vested in the hands of the head which in most instances delegates duties (such as assessing work plan of teachers, preparing teaching time table) to deputy heads. Also, most deputies are younger and as such are more active and likely to work longer hours than the leaders that are near retirement. Nevertheless, this is no measure of how harder they perform their duties compared to the heads.

Another variable that influenced the performance of practices was the type of school. As reported for job stress, school heads in boarding schools performed practices more than their counterparts in day schools. The capacity and administrative issues related to the management of boarding schools were more than that of day schools; hence, the higher rate of performing practices.

Last, the study highlighted the relationship between practices performed and satisfaction, and job stress on one hand and between job stress and job satisfaction on the other hand. The findings showed a significant positive relationship between practices performed and job satisfaction, showing the resilience of school heads in performing their duties. In sum, though the practices seem stressful, the satisfaction derived from performing the practices (Darmody & Smyth, 2016) serve as a motivator and coping mechanism to them.

Conclusion

This study examined the interrelationship among practices, job stress and job satisfaction and the impact of personal and school factors on the levels of performing practices, job stress and job satisfaction. Identifying variables that influence performance and satisfaction is essential in seeking to improve the health of school heads. Also, to better build the capacity of school heads and to improve school systems in general, knowledge of these variables could provide the basis for policy decision making. As school heads are the engine of school effectiveness and efficiency
(Cheng, 1994, as cited in Wang et al., 2018), the significant personal and school factors and the relationships established among the variables in this study should provide critical information to policymakers and education managers in fashioning out strategies to improve the health and satisfaction of school heads.

**Recommendation**

Given the findings established above, the study suggests the following recommendations for practice in the study context and countries with a similar cultural and educational system. The study recommends a stress management clinic specifically for younger school heads to support them build resilience against the stressful nature of the job. Also, considerations could be made for physical exercises, spending time with kids and family and participating in hobby activities (Mahfouz, 2020). Though job satisfaction seems to be high among school heads, the fact that older school heads were less satisfied but long-serving school heads were more satisfied was revealing. Organising in-service training is therefore paramount to build their capacity for new trends in human resource management, education administration and learning about best practices elsewhere. Deputy heads should equally benefit from such training programs. As results suggest, deputies recorded a higher satisfaction level, and this is good for the smooth administration of the schools. A motivated deputy head represents the head better in performing practices that ensure the general efficiency and effectiveness of the school, thus reducing the workload and stress that would have been suffered by the leader alone (Harris, 2004). Last, in appointing school heads, it is suggested that human resource officers carefully consider the age—school stress dynamics to determine the suitable head for a school type to have an excellent work-stress balance.

**Limitations**

The study used a self-report questionnaire. Though using this form of measure allows for sampling many participants at minimal cost, it gives room for participants to untruthfully respond to sensitive questions (Demetriou, Ozer & Essau, 2015). Also, the authors focused on time pressure and workload in measuring job stress. They made no distinction between deputy heads and heads in the study except for the analysis involving position. Nevertheless, the findings can be generalised to the study context and countries with a similar education system and culture. In future studies related to the subject, the researchers should consider involving only heads and adding an interview to serve as triangulation to gain a more comprehensive insight into the subject matter (Mertens & Hesse-Biber, 2012).

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Appendices

Appendix 1: Count of levels of Job Stress, Job Satisfaction and Practices Performed

<table>
<thead>
<tr>
<th>Levels</th>
<th>No. of School Heads</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Stress Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Stressed</td>
<td>17</td>
<td>8.7</td>
</tr>
<tr>
<td>Moderately Stressed</td>
<td>48</td>
<td>24.6</td>
</tr>
<tr>
<td>Stressed</td>
<td>130</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Job Satisfaction Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Satisfied</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Moderately Satisfied</td>
<td>54</td>
<td>27.7</td>
</tr>
<tr>
<td>Satisfied</td>
<td>137</td>
<td>70.3</td>
</tr>
<tr>
<td><strong>Practices Performed Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seldom / Sometimes performed</td>
<td>26</td>
<td>13.3</td>
</tr>
<tr>
<td>Often / Always performed</td>
<td>169</td>
<td>86.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>195</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Appendix 2 - Final items

A. Job Stress items

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1.</td>
<td>Working here makes it hard to spend enough time with my family.</td>
</tr>
<tr>
<td>S4.</td>
<td>I frequently get the feeling I am married to the school.</td>
</tr>
<tr>
<td>S5.</td>
<td>I have too much work and too little time to do it.</td>
</tr>
<tr>
<td>S6.</td>
<td>I dread the telephone ringing at home because the call might be school-related</td>
</tr>
<tr>
<td>S7.</td>
<td>I feel like I never have a day off.</td>
</tr>
<tr>
<td>S8.</td>
<td>Too many colleagues at my level in other schools get burned out by job demands.</td>
</tr>
</tbody>
</table>

B. Job Satisfaction items

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS1</td>
<td>My school is a good place to work.</td>
</tr>
<tr>
<td>JS10</td>
<td>My job makes a difference in the school community.</td>
</tr>
<tr>
<td>JS11</td>
<td>Most of the time, I feel satisfied with my job.</td>
</tr>
<tr>
<td>JS12</td>
<td>I feel responsible for making this school successful.</td>
</tr>
<tr>
<td>JS20</td>
<td>I would recommend this school to parents/guardians seeking guidance on school selection for their child.</td>
</tr>
</tbody>
</table>

C. Practices

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Performing subjects/class allocation with the cooperation of teachers</td>
</tr>
<tr>
<td>2.</td>
<td>Evaluating/assessing teacher's lesson notes</td>
</tr>
<tr>
<td>3.</td>
<td>Assessing teachers' performance</td>
</tr>
<tr>
<td>4.</td>
<td>Encouraging teachers to try out new teaching methods</td>
</tr>
<tr>
<td>5.</td>
<td>Giving feedback to parents and students' council about evaluation results</td>
</tr>
<tr>
<td>6.</td>
<td>Developing the school vision (Mission statement)</td>
</tr>
<tr>
<td>7.</td>
<td>Conducting / charring staff meeting</td>
</tr>
<tr>
<td>8.</td>
<td>Conducting school evaluations</td>
</tr>
<tr>
<td>9.</td>
<td>Negotiating with representatives of educational authorities</td>
</tr>
<tr>
<td>10.</td>
<td>Representing the school’s interest in meetings with superiors</td>
</tr>
<tr>
<td>11.</td>
<td>Building partnerships with other schools</td>
</tr>
<tr>
<td>12.</td>
<td>Organising parent information sessions</td>
</tr>
<tr>
<td>13.</td>
<td>Developing a plan for the continuous professional development of staff</td>
</tr>
<tr>
<td>14.</td>
<td>Cooperating with Organizations (e.g. N.G.O.s, Companies &amp; Associations)</td>
</tr>
<tr>
<td>15.</td>
<td>Writing reports for educational authorities</td>
</tr>
<tr>
<td>16.</td>
<td>Moderating meetings to resolve teacher conflict</td>
</tr>
<tr>
<td>17.</td>
<td>Maintaining contact with old students association.</td>
</tr>
<tr>
<td>18.</td>
<td>Communicating the school's vision (mission statement) convincingly.</td>
</tr>
<tr>
<td>19.</td>
<td>Initiating teamwork</td>
</tr>
<tr>
<td>20.</td>
<td>Cooperating with the school Management team</td>
</tr>
<tr>
<td>21.</td>
<td>Enforcing the agreed code of conduct related to interaction in the school</td>
</tr>
<tr>
<td>22.</td>
<td>Taking care of individual students if they have problems</td>
</tr>
</tbody>
</table>