The effect of organisational culture on teachers’ engagement at selected senior high schools in Kumasi Metropolitan

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ABSTRACT

Engaging teachers within an academic environment requires an enabling conducive climate or atmosphere, where assumptions, values and ways of interaction could contribute to the uniqueness of an institution. This calls for a sound and robust organisational culture that will motivate teachers to engage in their profession. The study examined the effect of organisational culture on teachers’ engagement at selected senior high schools in Kumasi Metropolitan. The study employed a descriptive survey. The study was descriptive. Questionnaires were utilized to accumulate data from a sample size of 238 respondents determined by Yamani formula. A simple random sampling approach was adopted in selecting the 238 respondents. Using the Denison Model of organisational culture, the study revealed the existence of four kinds of organisational culture among teachers within the various schools at Kumasi Metropolitan in order of importance that include involvement, adaptability, consistency and mission. The implication is that it is likely to have more than one type of organisational culture in an institution. Teachers also demonstrated that they were highly engaged in their profession. The findings further showed that enhancement of the four types of Denison organisational culture (involvement, adaptability, consistency, and mission) contributed to an increase in teachers’ engagement. The study recommended that management should promote all the four Denison organisational culture types as they significantly influence teachers’ engagement.

Key words: Organisational culture, teachers’ engagement.

INTRODUCTION

Teachers have a very significant role to play in moulding and refining the intellectual capacity and ability of students during the phase of studenthood or the formative stages in the school and beyond. Hence, the role of the teacher in human capital formation has become relevant and whatever is necessary to engage and retain teachers in educational institutions is of paramount importance. However, increasing trend of absenteeism, turnover intention and early retirement of teachers depict their disengaged state (Khushboo and Puja, 2015). In developing countries such as Ghana, inadequate and unattractive remuneration, as well as service conditions some professional teachers are receiving have resulted in attrition rate to seek for greener pastures elsewhere (Ministry of Education, 2017; Afibia, 2016; Mensah, 2011).

Teachers’ engagement will require an enabling conducive environment or atmosphere, where assumptions, values and ways of interaction could contribute to the uniqueness of an institution. This, therefore, calls for a sound and robust organisational culture. Khan (2016) showed that a culture that will embrace teachers’ value in the educational sector by providing them with their needs could be an
essential tool for enhancing teachers' engagement. Previous studies have shown that organisational culture plays a vital role in the extent to which employees get engaged to their work (Tims et al., 2011; Shuck et al., 2011; Alamcon, 2010; Hallberg and Schaufeli, 2006). Although previous studies have exhibited culture as a way of enhancing engagement, however, the type of culture within an organisation is shown to affect the degree to which employees are engaged in their job for organisational survival (Hobfoll, 2011). There are several theories and models that have shown types of culture. The major ones include Cameron and Quinn's (1998) four types of organisational culture, which comprise clan, adhocracy, market and hierarchy cultures. Also, Harrison and Stokes (1993) four culture typologies which include power, role, achievement and support cultures, and Hellriegel et al. (2001) four sorts of cultures including bureaucratic; clan; an entrepreneurial; and market cultures. Finally, Denison (2000) culture model consists of involvement, adaptability, consistency and mission. However, as compared with all other theories and models combined, Denison's (2000) model, which constitutes involvement, adaptability, consistency and mission is the focus of this study.

The reason stems from the basis of its behaviourism, capability to be used in all organisational levels and understanding concerning indicators and aspects of organisational culture (Saeeda Ardekani et al., 2010). Where there is involvement, according to Coffey et al. (2013), there is assurance of the participation of employees in decision making which can encourage teachers' commitment to feel control on their job, developing the capabilities to meet what is required of them. Also, the education sector if adaptable to the changing environment can make changes in teachers' life that can reflect in their engagement level, thereby making them consistent and dedicated to the organisational mission which is characterised by aims and purposes. Despite the attention given to Denison (2000) model as essential for all corporate level, few types of research on it have been done on how it relates to organisational performance, commitment, social capital and particularly employee engagement in different organisations. Besides, limited studies focused on educational sectors (Owusu, 2016; Dankwa, 2016; Mercen, 2016, Khan, 2016; Asghar et al., 2015). It has, therefore, become pertinent to further investigate into Denison model of organisational culture on engagement, focusing on teachers within educational sectors. This study, therefore, seeks to examine organisational culture and teachers' engagement focusing on selected senior high schools in Kumasi Metropolitan utilising Denison model of organisational culture. Since the types of culture currently existing at schools within Kumasi Metropolitan and their effect on teachers' engagement are unknown, it has become very relevant to fill this gap and gain a practical insight into how organizational culture construct can influence teachers' engagement.

LITERATURE REVIEW

The concept of organisational culture

Linnenluecke and Griffiths (2010) have reviewed different work of scholars and noted that the concept of organisational culture first emerged in the 1970s and 1980s and then on 1995 it became one of the most influential but also most controversial ideas in management research and practice. Furthermore, as per Linnenluecke and Griffiths (2010) explanation, culture concepts have suggested a variety of definitions, ranging from notions of accepted behavioural rules/norms to shared values, ideologies, beliefs and shared patterns of meaning. According to Dolan and Lingham (2012), culture is a set of values and commonly held beliefs that determine which behaviours are acceptable and expected for a given group. This is buttress by efforts to regulate behaviour and corrective actions when the actions of some workers become unacceptable to the institution (Kotter and Heskett, 2011). Robbins and Judge (2013) support Dolan and Lingham definition by explaining culture as a system of shared meaning held by members that distinguish the organisation from other organisations. Thus, it is a distinct personality of an organisation (Dolan and Lingham, 2012).

Organisational culture is created and maintained through different interactions between team members, teams, organisations, etc. It also reflects the behaviour that is characterised by the values, norms, and practices commonly accepted by the members of the organisation (De Long and Fahey, 2000; Jolaee et al., 2014; Omerzel et al., 2011).

According to Schein (2010), organisational culture involves the values, visions, standards, working language, frameworks, and images, convictions and propensities that guide the way and manner in which an organisation operates. Denison and Neale (2011) further opined organisational culture as the underlying value, beliefs and principles that serve as a foundation for an organisation management system, as well as the set of management practices and behaviour that reinforce those basic principles. Organisational culture is recognised as a significant determinant of organisations' ways of doing things, decisions, and management practices (Cameron and Quinn, 2011; Schein, 2010). Scholars considered culture as the attitudes, values, beliefs, and behaviours that are shared by a particular group of people (Derensky, 2006; Kessapidou and Varsakelis, 2002; Lee and Yu, 2004). Luu (2013) viewed organisational culture as the interaction among assumptions, values, and meanings in an entity which creates momentum for its organisational members' achievements.
Regardless of the various definitions provided, the most straightforward description of any culture in any organisation can be captured as 'the way we do things around here' and 'the way we treat one another around here' (McKinlay and Williamson 2010). Eventually, workers will need to share and exchange their ideas and knowledge with others because it is the 'natural' way of doing things, rather than being forced to do so (Alam et al., 2009).

The above definitions have something in common, which explains what organisational culture is. Organisational culture is a system which incorporates shared values, norms, attitudes and assumptions that are held by members of the organisation. Not only this but also organisational culture encompasses a set of management practices behaviour that reinforces the organisation's basic principles. Ultimately, it will be the foundation for an organisation management system, organisational ethics, technologies, strategies, image, products, services, appearance, etc.

**Model of Denison organisational culture**

This section of the literature presents the model relating to organisational culture relevant to this study which includes a current approach based on a four-dimensional model developed by Denison and Neale (2000). Denison and Neale (2000) identify four cultural traits which include Involvement, Consistency, Adaptability and Mission. These underlying traits are explained in terms of a set of managerial practices and standards utilising the twelve (12) indices that make up the model (Denison and Neale, 2011). Figure 1 shows the model with the succeeding paragraphs briefly discussing each of the four organisational culture traits and their respective indices.

**Involvement culture**

Involvement is the first organisational trait which ensures the participation of employees in decision making; it also relies on a team effort to get work done and continual investment in the development of employee's skills. Active organisations empower employees, they count on teamwork, and they develop personal skills at all entity levels. Top managers, the executives and the workers are actively engaged in the work they perform, and they feel they are part of the corporation. The members of an organisation can influence, to a certain degree, the decisions that have an impact on their job, and they feel that the tasks performed lead to the fulfilment of the set objectives. Involvement specifically features empowerment where employees have authority, initiative and ability to manage their work; orientation towards teamwork where the organisation counts on the team's efforts; and skills development meaning that the organisation invests in the employees' skills development (Pirayeh et al., 2011).

**Consistency culture**

This defines values and elements that form the basis of a healthy organisational culture. Organisations tend to be active because they have strong cultures, and they are coherent, well-corroborated and integrated. The employees' action depends on a well-defined set of values, and the leaders have the required skills to reach an agreement even when there are very different views. Consistency creates a strong culture that relied on beliefs, values, symbols that are understood and supported by the staff. Consistency is a potent source of stability and internal integration resulting from a mindset familiar to all members of the organisation and a high degree of compliance. Distinctive features of consistency include core values which refer to the existence of a standard set of values; an agreement which means both consensus and the ability to reconcile differences that occur; and coordination and integration meaning that although different, the members of the organisation work together to achieve organisational objectives. The first two traits (involvement and consistency) address the internal dynamics of the organisation but do not address the interaction of the organisation with the external environment. The following two traits, adaptability and mission, focus on the relationship between the organisation and the external environment (Kokina and Ostrovska, 2013).

**Adaptability Culture**

An adaptable organisation has a value that focuses on external situations and demands (Nurdin et al., 2010). Such an organisation creates norms and beliefs that support any responses to change. Adaptable organisations are characterised as risk-taking; they learn from their mistakes, can create change, and are driven by their customers (Denison, 2000). Adaptable organisations are those that take risks, learn from their own mistakes and have the ability and experience necessary to create change. These institutions depend on a continuous shift in the system leading to improved group skills to provide value to customers (Pirayeh et al., 2011). Thus, a culture of adaptability facilitates the transition of external demands and customer expectations into internal changes of the organisation. Furthermore, this trait is considered to be a defensive capacity for responding to unexpected environmental threats (Yilmaz and Ergun, 2008). Moreover, those employees who espouse the trait of adaptability can
express themselves in wide-ranging behaviours (Chatman et al., 2012), which in turn helps them to explore different solutions to a problem. Adaptability has an impact on organisational effectiveness in three ways which include creating change viewed in terms of the ability to perceive and meet the requirements of the external environment through change. Also, customer focus, where the organisation understands and responds to the customer’s needs, anticipating their future demands which reflect the degree to which the organisation is concerned with customer satisfaction. Finally, organisational learning involves process through which the organisation receives decodes and interprets the signals from the external environment, turning them into opportunities to encourage innovation, information collection and skills development.

**Mission culture**

Mission defines a significant long-term direction for the organisation. Successful organisations have a well-defined purpose and a direction defining the organisational and strategic objectives which express the company's vision for the future. The mission reflects a clear, concrete trend both for an institution and for its members. This dimension is characterized by three features which include strategic direction showing that there is a clear strategy in the organisation that gives meaning and guidance to the employees. Also, aims and objectives showing that the management sets ambitious but realistic goals that are understood and measurable. Lastly, vision meaning that there is a long-term vision that generates excitement and motivation among employees and which is not affected by shortterm objectives (Pirayeh et al., 2011).

**Employee engagement**

Engagement has been studied for a long time, but the concept of teachers’ engagement is relatively new. Western nations have been conducting almost all studies on these concepts. Ghana, being a land renowned for education since ages, and which has many educational institutions rendering programmes of varied disciplines, has never covered any study of this kind (teachers engagement). For this reason, employee engagement would be mostly used throughout the concept of teachers’ engagement. Many scholars and HR practitioner of different backgrounds have defined employee engagement in diverse ways. The idea of employee engagement is viewed as a psychological state of involvement, commitment, and attachment-related to one’s work (Macey and Schneider, 2008), which include a "positive reflection towards the organisational goals and values (Robinson et al., 2004).

According to Kahn, the qualitative method employed enable to capture a detailed look at specific moments and circumstances at work toward comprehending how workers are truly engaged at work. Based on his definition of engagement as “the harnessing of organisation members to their job roles” and disengagement as “the uncoupling of selves from job roles” (Kahn, 1990: 694), he propounded that engagement hinged on three aspects which are
Emotional, cognitive and physical. The cognitive dimension of engagement emphasises on teachers’ beliefs concerning the organisation, authority within the organisation and responsibility fitness. The emotional aspect constitutes how employees feel about the organisation within which they work, its authority and duty fitness. Physical, on the other hand, elaborate on actual employee strength exercised to complete an assigned task given to each person. This means that engagement is not limited to an emotional connection with an institution but is also about feeling mentally stimulated, and physically, knowing there are chances to grow in the organisation.

Employee engagement defines the affective-emotional state of positive personal fulfilment and well-being, characterised by vigour, dedication, and absorption with regard to work. Schaufeli et al. (2006) showed that engagement could be classified as absorbed, vigour and dedication. An aspect of engagement is absorption which refers to the cognitive dimension of engagement in which the employees have the likelihood and tendency to be happily involved and have a fascinating experience where they have all the concentration in their jobs (Bakker et al., 2008; Schaufeli and Bakker, 2004). A state of absorption known as flow exists when individuals are concentrating on the task at hand and intrinsically motivated to continue based on comparable levels of skill and challenge as well as the goals and feedback obtained from the activity (Llorens et al., 2013; Mao et al., 2016).

Employees can demonstrate vigour through determination, effort, and drive to complete objectives (Medhurst and Albrecht, 2016). Moazami-Goodarzi et al. (2014) predicted that vigour in the working atmosphere could have positive benefits outside of work. Vigour can be referred to as high levels of energy and mental resilience while working and is characterised by a willingness to invest effort in one’s work, and persistence in facing difficulties. Dedication is viewed as an employee’s affective experience of pride and enthusiasm. Medhurst and Albrecht (2016) opined that workers that exhibit the affective domain through excitement and positive emotions related to a task. Studies have identified positive results of dedication as being internal or external, implying they are experienced by the employee or the organisation (Valentin et al., 2015). Teachers who are usually engaged demonstrate dedication towards work tasks they perceive as meaningful. A teachers’ extent of engagement can vary within institutions. For instance, Iqbal and Sumaira (2015) discovered that the level of engagement among higher education faculty members was high whereby dedication was the highest, followed by absorption and then vigour.

Previous researches view employee engagement as comprehending the extent to which workers dedicate to something or someone within their workplace, how hard they work, and how long they remain because of that dedication (Alvi et al., 2014). De Clercq et al. (2014) posit that employee engagement is a set of positive emotions that brings congruence and centred on goal alignment, ending in the decrease of organisational nonconformity. Employee Engagement is a measurable quantity of an employee's positive or negative emotional attachment to their task, co-workers and company that profoundly impact their willingness to learn and perform at the job (Shanmuga and Vijayadurai, 2014). The outcome will, therefore, be a high performing organisation where individuals are nourishing, and performance is improved and maintained. This implies that where teachers are engaged in their profession, it can lead to higher performance.

Organisational culture and employee engagement

Several studies in developed and developing countries have confirmed a link between organisational culture and employee engagement (Pepra-Mensah and Addai, 2018; Brenyah and Obuobisa-Darko, 2017; Mohammed et al., 2017). Tims et al. (2011) discovered that workers sense of engagement, unity, dedication, strength and output fulfilment are embraced by the culture within which they operate. Hobfoll (2011) also attested that the prevailing of culture within an organisation influence the extent to which workers engage in their task for organisational survival. Crawford et al. (2010) further affirmed that the cognisance employees create on a culture existing in a firm have a relevant effect on their job engagement. When employees develop a positive attitude about the culture in their firm, they tend to dedicate their energy and abilities, invest their time and efforts and also become mentally connected and much engaged in their work (Bakker et al., 2011).

Allen (2010) in his Person-Environment (P-E) Fit Model, established that organisations that develop cultures that are compatible with the values of their members could retain and engage a higher percentage of their key employees. According to Jane and Kathi (2018), a meaningful or positive organisational culture aids in engagement process because a positive workplace supports its employees and building employee engagement calls for many aspects of a positive organisational culture. Sirisetti (2012) notes that improved engagement happens when there are positive working relationships, employee input in decision-making, and supporting growth and development with learning opportunities which are all features of organisational culture. May et al. (2004) showed that the three psychological conditions - cognitive, physical, and emotional engagement - are affected by organisational culture; which, therefore, implies that an employee's cognitive, behaviour and emotional engagement is an outcome of the norms, beliefs and values of a firm. Ramlall (2008) suggested that it is possible to ‘induce a sense of engagement’ in employees since an organisation’s culture is a potent driver of employee behaviour. Furthermore,
Figure 2: Arthur’s construct, 2019.

Alarcon (2010) argued that work engagement has a relationship with several positive work outcomes. That is why it is logical for organizations according to Alarcon, to nurture a positive culture that emphasizes employees' continued engagement in their assigned tasks, with the idea of keeping them much longer than organizations that have little interest in employee engagement. Besides, Denison (2010) reported that employee engagement is an outcome of a great-established organisational culture.

From the above, it can be revealed that culture played a very vital role in influencing employee engagement. This study, therefore, seeks to investigate how culture can influence teachers' engagement which is very limited in developing countries which face teachers' absenteeism, undedicated and turnover issues. Only, Khan (2016) attested in a study in this area and posited that for teachers to be highly engaged in the work they do, the role, behaviours, values and the patterns which are an attribute of culture manifested in the organisation play a significant role and vital part. This study further seeks to add to existing work to get in-depth knowledge in this area of research focusing on Denison organisational culture model.

**Conceptual model**

The study came out with a conceptual model, as presented in Figure 2. Based on the literature, the following hypothesis was tested at 0.05 significant level:

H1: There is no statistically significant relationship between involvement and teachers' engagement.

H2: There is no statistically significant relationship between consistency and teachers' engagement.

H3: There is no statistically significant relationship between adaptability and teachers' engagement.

H4: There is no statistically significant relationship between mission and teachers' engagement.

This framework set up together different components (involvement, consistency, adaptability and mission) that offer ascent to the advancement of work engagement. For the phenomenon of organisational culture and its effect on teachers' engagement to be studied empirically, there is the need for a conceptual framework that pulls together the relationship between the typology of organisational culture established by Denison (2000) (involvement, consistency, adaptability and mission) and teachers' engagement variables by Schaufeli et al. (2002) (vigour, dedication and absorption). This study assumed that teachers' engagement could be hindered or helped by some specific dimensions of organisational culture. The conceptual model, apart from providing a foundation for focusing on specific variables for the research, also makes it possible for the study to collect and analysed data on these particular contextual variables as a way of assessing organisational culture in selected senior high schools within the Kumasi Metropolitan in the Ghanaian setting. It also makes it possible to consider the extent to which these typologies of organisational culture contribute to teachers' engagement which immensely impacts on the output of the organisation.

**MATERIALS AND METHODS**

The study employed a descriptive survey. The target population consisted of a staff of six (6) selected senior high schools within Kumasi Metropolitan, totaling five hundred and hundred and eighty-nine (589). They included Ejisuman Senior High School (143), Bonwire Senior High
School (96), Ejisu Senior High School (84), Achina Senior High School (73), Juaben Senior High School (152) and Church of Christ Senior High School (41). The sample size of two hundred and thirty-eight was utilized for the study. The study determined the sample size using Taro Yamane (1967) formula at a confidence interval of 95% as given as:

\[ n = \frac{N}{1+N(e^2)} \]

Where \( n \) = sample, \( N \) = population size, \( e \) = error limit or the critical value of the observation

For the population of 589, \( n = \frac{589}{1+589(0.05)^2} \cong 238.220 = 238 \).

Therefore, the sample size for each institution was determined by the formula:

\[ n_h = \frac{nN_h}{N} \]

Where \( n_h \) is the sample size of firm \( h \)
\( N_h \) is the total population of the schools \( h \)
\( N \) is the total population of the schools
\( n \) is the total sample size of the study as determined above.

To find the sample size for each Senior High School, the calculations were:

- \( n_{Ejisu\,Senior\,High\,School} = \frac{238 \times 143}{589} = 57.783 = 58 \)
- \( n_{Benwire\,Senior\,High\,School} = \frac{238 \times 96}{589} = 38.791 = 39 \)
- \( n_{Achina\,Senior\,High\,School} = \frac{238 \times 84}{589} = 33.942 = 34 \)
- \( n_{Juaben\,Senior\,High\,School} = \frac{238 \times 152}{589} = 61.419 = 61 \)
- \( n_{Church\,of\,Christ\,Senior\,High\,School} = \frac{238 \times 41}{589} = 16.567 = 17 \)

Therefore, the sample size when computed together was two hundred and thirty-eight (238). The sampling technique employed for the study was simple random sampling. With this sampling, all the teachers within each school were assigned numbers up to the population of the study. Any participant (teachers from each school) whose number was picked within the sample range was selected for the study. This assured that each member of the target population had an equal and independent chance of being included in the sample.

The study adopted a primary source of data derived from one set of questionnaires administered to respondents. Denison organisational culture survey was employed for measuring the four main cultural traits, namely: involvement, consistency, adaptability and mission. 17-items of Work engagement developed by Schaufeli et al. (2002) were employed to measure teachers’ engagement. A four-point Likert-type scale ranging from 1 (strongly agree) to 4 (strongly disagree) was utilised for the study. The internal consistency was measured by the authors and reliability analysis showed that the scale demonstrated good internal consistency of 0.84 (\( \alpha = 0.84 \)) for involvement, 0.89 (\( \alpha = 0.89 \)) for consistency, adaptability had 0.88 (\( \alpha = 0.88 \)) and mission internal consistency was 0.92 (\( \alpha = 0.92 \)) which was good. Also, the work engagement was measured and came out with good internal consistency of 0.82 (\( \alpha = 0.82 \)) for vigour, 0.73 (\( \alpha = 0.73 \)) for dedication and absorption had .86 (\( \alpha = 0.86 \)) which depict that the internal consistencies of the variables were good. All the questionnaires were coded into a spreadsheet application, grouped under the various themes and concepts based on the questionnaire and then transferred into an SPSS program for the data analysis. Percentages, Mean score, and linear regression were employed for the analysis of the study. The results of the study were interpreted and discussed by comparing with that of literature accordingly.

**RESULTS**

This section analysed data to identify the dominant (Denison model) type of organisational culture at the various sampled schools. Respondents were asked to indicate the agreement or disagreement based on a four-point rating scale. The study adopted a Mean Score to find the dominant Denison types of organisational culture by ranking from the highest to lowest in order of priority at the various schools as demonstrated. Figure 3 shows all the cultures within the different schools being computed together.

From Figure 3, it could be seen that involvement is the dominant Denison culture at the various schools in Kumasi Metropolitan with a mean score of 3.01, followed by adaptability culture with a mean score of 2.97. Mission was the next with a mean score of 2.90 and consistency, which is portrayed as part of the culture of the various schools at Kumasi Metropolitan was the least with a mean value of 2.87. The mean score of 3.01 to 2.82 was within the range of agreed, which demonstrates that the respondents agreed that these types of Denison culture exist within the various schools.

**Teachers level of engagement within Kumasi Metropolitan**

The study also intended to determine whether teachers were engaged within the metropolitan. The study adopted a Mean Score to analyse this part of the questionnaire to find how teachers are engaged within the metropolis, as shown in Table 1.
The components of engagement, which comprised vigour, dedication, and absorption were employed to determine whether teachers are engaged at Kumasi Metropolitan. Table 1 shows that teachers were vigorously and dedicatedly involved in their profession with the highest mean of 3.22 each, followed by absorption (3.01). Vigorously, teachers were very resilient, mentally (3.22) and felt bursting with energy (3.21). The teachers further illustrated that they feel like going to work when they get up in the morning (mean=3.18), and at work, they are always persevering even if when things do not go well and feel bursting with energy (3.17) as well as strong and vigorous (3.12). Lastly, the least mean score of 3.09 affirmed that few teachers within the various schools agreed that they could continue working for very long periods at a time.

Dedicatedly, teachers were engaged in their profession with a mean value of 3.20. The teachers within the various schools in the metropolitan manifested that their job inspires them (3.39), and find the work that they do full of meaning and purpose (3.25). Others also demonstrated that they are proud of the work that they do (3.16), enthusiastic about their job (mean=3.15), and their job is challenging (mean=3.03).

In terms of how teachers were absorptively engaged (3.10), it was shown that teachers feel happy when working intensely (mean =3.16) and forget everything else around them (3.11). They further showed that time flies when working (mean= 3.11). Most of the teachers also depicted that they get carried away when working and hard to detach themselves from their job with the same mean value of 3.10. However, few of the teachers agreed that they are immersed in their work (mean=3.06).

**Correlation between the independent (organisational culture constructs) and dependent (teachers’ engagement) variables**

Pearson correlation was conducted to determine the association between the independent and dependent variables since it is a demand in performing regression analysis.

Table 2 shows that all the independent variables (involvement, consistency, adaptability, mission) correlate with the dependent variable (teachers’ engagement).

**The relationship between organisational culture (involvement) and teachers engagement**

The basic purpose of the study was to find out the effect of
organisational culture on teachers’ engagement. Table 3A and C shows first how involvement, as a pattern of Denison culture within the various schools at the metropolis, influences teachers’ engagement. From the regression analysis, the adjusted R-square value shown in Table 3A shows that 38.2% of the variation in the dependent variable (teachers’ engagement) is explained by the independent variable (involvement). As observed from the ANOVA of Table 3B, it could be deduced that an F statistic of 146.030 inferred that the overall model was significant. The entire regression model is fit since the considerable value of 0.000 is less than 0.005 (F=146.030,
The relationship between organisational culture (consistency) and teachers engagement

To analyse the association between consistency as a pattern of Denison culture and teachers’ engagement, the organisational culture (consistency) variable was computed by averaging all responses on consistency constructs. The same was utilised for teachers, and then a simple regression was employed as shown in Table 4A, B and C.

Results from Table 4A show that 34.6% of the variation in the dependent variable (teachers’ engagement) can be explained by the independent variable (consistency). Thus, the adjusted R-square value was found to be 0.346, which means that a 1% change in consistency culture resulted in a 34.6% increase in teachers’ engagement. As observed from the ANOVA of Table 4B, it could be deduced that an F statistic of 126.319 inferred that the overall model was significant. This was supported by a probability value of 0.000. The entire regression model is fit since the significant value is less than .005 (F=126.319, Sig=.000). This means that the independent variable has the capability of predicting the dependent variable. The coefficient of the regression model shows that consistency as a pattern of Denison culture significantly and positively predicts teachers’ engagement (β= 0.590, p<.000). Therefore, the null hypothesis (H₁) which states that there is no statistically significant relationship between consistency and teachers’ engagement was rejected. This implies that respondents’ level of consistency as a pattern of Denison culture predicts teachers’ engagement in the various schools at Kumasi Metropolitan.

The relationship between organisational culture (adaptability) and teachers engagement

To analyse the adaptability as a pattern of Denison culture and teachers’ engagement, the organisational culture (adaptability) variable was computed by averaging all responses on adaptability constructs. The same was utilised for teachers’ engagement, and then a simple regression was employed as presented in Table 5A, B and C.

The model summary in Table 5A indicates that the adjusted r-squared value of 0.523 gives the implication that 52.3% of the variation in the dependent variable (teachers’ engagement) could be explained by the independent variable (adaptability). As depicted in ANOVA of Table 5B, it could be deduced that an F statistic of 260.769 inferred that the overall model was significant. This was supported by a probability value of 0.000. The entire regression model is fit since the significant value is less than 0.05 (F=260.769, Sig=.000). This means that the independent variable has the capability of predicting the dependent variable. The coefficient of the regression model shows that adaptability as a pattern of Denison culture significantly and positively predicts teachers’ engagement (β= 0.722, p<.000). Therefore, the null hypothesis (H₂) which states that there is no statistically significant relationship between adaptability and teachers’ engagement was rejected. This implies that respondents’ level of adaptability as a pattern of Denison culture predicts teachers’ engagement in the various schools at Kumasi Metropolitan.
Table 4A: Model summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R square</th>
<th>Std. Error of the estimate</th>
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<tr>
<td>1</td>
<td>0.590&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.346</td>
<td></td>
<td>0.470</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), Consistency

Table 4B: ANOVA.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
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<td>1</td>
<td>Regression</td>
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<td>126.319</td>
<td>0.000&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>Residual</td>
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<td>0.221</td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
<td>237</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Teachers Engagement
<sup>b</sup> Predictors: (Constant), Consistency.

Table 4C: Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
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<th>Sig.</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.944</td>
<td>0.170</td>
<td>5.538</td>
</tr>
<tr>
<td></td>
<td>Consist</td>
<td>0.667</td>
<td>0.059</td>
<td>0.590</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Teachers Engagement

Table 5A: Model summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.725&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.525</td>
<td>0.523</td>
<td>0.401</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), Adaptability

Table 5B: ANOVA.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>41.961</td>
<td>260.769</td>
<td>0.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>236</td>
<td>0.161</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>237</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Teachers’ Engagement
<sup>b</sup> Predictors: (Constant), Adaptability.

Table 5C: Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.707</td>
<td>0.134</td>
<td>5.277</td>
</tr>
<tr>
<td></td>
<td>Adapt</td>
<td>0.714</td>
<td>0.044</td>
<td>0.725</td>
</tr>
</tbody>
</table>

<sup>a</sup> Dependent Variable: Teachers’ engagement.
This means that the independent variable has the capability of predicting the dependent variable. The coefficient of the regression model shows that adaptability is a dimension of Denison culture significantly and positively predicted teachers' engagement ($\beta= 0.725$, $p< 0.000$). This, therefore, gives an implication that the more adaptability dominates at Kumasi Metropolitan, the more teachers' engagement can be predicted to increase and vice versa. Therefore, the null hypothesis ($H_0$) which states that there is no statistically significant relationship between adaptability and teachers' engagement was rejected.

**The relationship between organisational culture (mission) and teachers engagement**

To analyse the mission as a pattern of Denison culture and teachers' engagement, the organisational culture (mission) variable was computed by averaging all responses on mission constructs. The same was utilised for teachers' engagement, and then a simple regression was employed as presented in Table 6A, B and C.

The study showed that the Adjusted R-squared of 0.518 indicates that 51.8% of the variation in the dependent variable (teachers' engagement) could be explained by the independent variable (mission). The F statistic of 255.572 in Table 6B also showed that the overall model was significant. This implies that as the mission of the various schools as a pattern of Denison culture increases, teachers' engagement also increases and vice versa. The beta value study also attested that there is a significantly positive relationship between mission and teachers' engagement ($\beta$-value=0.721, p-value=0.000). Therefore, the null hypothesis ($H_0$) which states that there is no statistically significant relationship between mission and teachers' engagement was rejected.

**DISCUSSION**

The research was conducted to access some objectives. This part discusses the results of the study in connection with the research objectives.

**The dominant Denison model types of organisational culture within Kumasi Metropolitan**

Denison and Neale (2011) opined organisational culture as the underlying value, beliefs, and principles that serve as a foundation for an organisation management system, as well as the set of management practices and behaviour that reinforce those basic principles. The study, therefore, aimed to investigate the culture practices among teachers at Kumasi Metropolitan utilising Denison organisational culture type. It was shown that four types of organisational culture exist at the selected Senior High Schools in Kumasi Metropolitan among teachers. These culture in order of magnitude when computed together within the metropolitan included involvement (mean score= 3.01), adaptability (mean score= 2.97), mission (mean score= 2.90), and consistency (mean score= 2.82). This was in congruence with Denison and Neale (2011) who identify four cultural traits which include involvement, consistency, adaptability, and mission. The various schools having involvement as the highest culture demonstrates that teachers have authority, initiative and ability to manage their work; counts on the team's efforts; and the schools invest in the employees' skills development (Pirayeh et al., 2011). Adaptability, which is the second-highest culture, revealed that the school encompassed teachers with risk-taking; who learn from their mistakes, can create change, and are driven by their customers (Denison, 2000). Mission as the third culture practice demonstrates that the various schools have strategic direction showing that there is a clear strategy in the schools that gives meaning and direction to the teachers; aims and objectives showing that the management sets ambitious, but realistic goals that are understood and measurable. Further, vision denotes that there is a long-term vision that creates excitement and motivation among teachers and which is not affected by shortterm objectives (Pirayeh et al., 2011). Consistency as the least agreed on culture among teachers within the metropolitan demonstrates that there is a unique feature of consistency including core values which refers to the existence of a common set of values; and an agreement which means both consensus and the ability to reconcile differences that occur among teachers. Others, including coordination and integration, implies that although different, the members of the schools work together to achieve institutional objectives. This study agrees with Khan (2016), who confirmed that all four types of Denison culture are relevant within higher schools. Therefore, these types of culture could be relevant to the improvement of schools.

**Teachers’ level of engagement within the selected senior high schools at Kumasi Metropolitan**

The second objective found out how teachers are engaged within the Kumasi Metropolitan. The study revealed that teachers were vigorously and dedicatedly engaged in their profession with the highest mean of 3.20 each, followed by absorption (3.11). Vigorously, teachers feel like going to work when they get up in the morning, very resilient, mentally, always persevering even if when things do not go well, feel bursting with energy, strong and vigorous and continue working for very long periods at a time. This
Table 6A: Model summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.721</td>
<td>0.520</td>
<td>0.518</td>
<td>0.403</td>
</tr>
</tbody>
</table>


Table 6B: ANOVA.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1</td>
<td>41.560</td>
<td>255.572</td>
<td>0.000b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>236</td>
<td>0.163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>79.937</td>
<td>237</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent variable: Teachers' engagement. 
b. Predictors: (Constant), Mission. Field Survey, 2019

Table 6C: Coefficients.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.026</td>
<td>0.116</td>
<td>8.865</td>
</tr>
<tr>
<td>Mission</td>
<td>0.622</td>
<td>0.039</td>
<td>0.721</td>
<td>15.987</td>
</tr>
</tbody>
</table>


shows that teachers had a concentration in their profession. This is similar to researches that affirmed employees have the likelihood and tendency to be happily involved and have a fascinating experience where they have all the concentration in their jobs (Bakker et al., 2004).

Dedicatedly, the teachers within the various schools in the metropolis manifested that they were proud of the work that they do, their job is challenging, were enthusiastic about their job, find the work that they do full of meaning and purpose, and their job inspires them. This study contradicts with Iqbal and Sumaira (2015), who discovered that the level of engagement among higher education faculty members was high whereby dedication was the highest followed by absorption and then vigour. This means that the level of engagement can vary within organisations.

Regarding how teachers were absorptively engaged, it was revealed that teachers feel happy when working intensely, forget everything else around them, and time flies when working. Others also manifested that they get carried away when working, find it difficult to detach themselves from their job and are immersed in their work. This is in agreement with researchers who posited that an aspect of engagement is absorption which refers to the cognitive aspect of engagement in which the employees have the likelihood and tendency to be happily involved and have a fascinating experience where they have all the concentration in their jobs (Bakker et al., 2008; Schaufeli and Bakker, 2004). This implies that when teachers are absorptively engaged, they will have a focused mind and be glad to accomplish their activities.

The effect of organisational culture on teachers’ engagement

The study further sought to determine how Denison model types of organisational culture can influence teachers’ engagement. The study showed that all four Denison model types of organisational culture influence teachers’ engagement. With involvement as a dimension of Denison culture, the coefficient of the regression model shows that involvement as a pattern of culture significantly and positively predicts teachers’ engagement ($\beta = 0.618, p<0.000$). The adjusted R-square also attested that 38.0% of the variation in the dependent variable (teachers’ engagement) is explained by the independent variable (involvement). An F statistic of 45.309 inferred that the overall model was significant. This means that the independent variable has the capability of predicting the dependent variable. The first hypothesis which states that there is no statistically significant relationship between involvement and teachers’ engagement was rejected.
Consistency as a dimension of Denison culture revealed a significant influence on teachers’ engagement ($\beta=0.590$, $p<0.000$). The adjusted R-square value was accounted for 0.346, which means that a 1% change in consistency culture resulted in a 34.6% increase in teachers’ engagement. An F statistic of 126.319 inferred that the overall model was significant. This means that respondents’ consistency as a pattern of culture predicts teachers’ engagement in the various schools at Kumasi Metropolitan. The second hypothesis which states that there is no statistically significant relationship between consistency and teachers’ engagement was rejected.

Further, adaptability as a pattern of Denison culture also positively influence teachers’ engagement as the adjusted r-squared value of 0.523 gives the implication that 52.3% of the variation in the dependent variable (teachers’ engagement) could be explained by the independent variable (adaptability). An F statistic of 260.769 inferred that the overall model was significant. The coefficient of the regression model shows that adaptability as a dimension of Denison culture significantly and positively predicted teachers’ engagement ($\beta=0.725$, $p<0.000$). This, therefore, gives an implication that the more adaptability dominates at Kumasi Metropolitan, the more teachers’ engagement can be predicted to increase and vice versa. The third hypothesis which states that there is no statistically significant relationship between adaptability and teachers’ engagement was rejected.

Lastly, mission as the part of Denison culture showed a significantly positive relationship with teachers’ engagement ($\beta$-value=0.721, $p$-value=0.000). The Adjusted R-squared of 0.518 indicates that 51.8% of the variation in the dependent variable (teachers’ engagement) could be explained by the independent variable (mission). The F statistic of 255.572 also showed that the overall model was significant. This implies that as a mission of the various schools as a pattern of Denison culture increases, teachers’ engagement also increases and vice versa. The fourth hypothesis which states that there is no statistically significant relationship between mission and teachers’ engagement was rejected. It could, therefore, be attested that as all the culture types positively influence teachers’ engagement, the study is in agreement with Khan (2016) who showed that Denison organisational culture types positively influence teachers’ engagement. The study also is similar to other researches that demonstrated that organisational culture influences employee engagement (Mohammed et al., 2017; Namrita and Yoginder, 2017; Brenyah and Obuobisa-Darko, 2017; Rehema, 2016; Joseph, 2016; Moela, 2016).

**CONCLUSION AND RECOMMENDATIONS**

This study examined the effect of organisational culture on teachers’ engagement. Using the Denison Model of organisational culture, the study shows the existence of four kinds of organisational culture among teachers within the various schools at Kumasi Metropolitan. The types of Denison Model of organisational culture in order of importance include involvement, adaptability, consistency, and mission. This shows that it is likely to have more than one type of organisational culture in an institution. Teachers also demonstrated that they were highly engaged in their profession. It could, therefore, be concluded that the findings of the study have a significant contribution for the various schools within the metropolitan, that is, enhancement of the four types of Denison organisational culture (involvement, adaptability, consistency, and mission) will leads to an enhancement in teachers’ engagement.

The following recommendations are therefore, suggested based on the outcomes of the study:

- The study recommends that the various schools within Kumasi Metropolitan should emphasize much on consistency as it was found to be the least Denison organisational culture type.
- Secondly, management should find more ways of maintaining and improving teachers’ engagement, specifically absorption, as it was the least accepted by the teachers.
- Thirdly, management should promote all the four Denison organisational culture types as they significantly influence teachers’ engagement.

**IMPLICATIONS TO RESEARCH AND PRACTICES**

Practically, the outcomes can help educational leaders to adopt a strategic organisational culture type or types to optimize merits for their institutions.

The study will be a support to management in institutions to link organisational culture mechanisms to engagement that could encourage performance.

This study could also be used as an assessment tool to evaluate the status of Denison organisational culture model, and thus, help to identify areas for improvement. Academics could use it to understand the Denison organisational culture model better, its effect on teachers’ engagement and build models that would further expand this study in other academic institutions.

**FUTURE RESEARCH**

Further studies in this area should consider the identification of more different variables on organisational culture in other institutions to add to the body of knowledge.

Also, this study can be expanded to several institutions...
as possible to give more meaning to the present study.

ACKNOWLEDGEMENT

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REFERENCES


