Exploring academic staff retention strategies: The case of Ghanaian technical universities

Orientation: The crippling effects of staff turnover on higher education performance and success are disruptive and influence the core of national human capital development and thus call for a swift response using retention strategies.

Research purpose: This article sought to explore the nature of academic staff retention strategies of technical universities in Ghana.

Motivation for the study: Literature on academic staff retention strategies in the context of Ghanaian technical universities appears to be limited, scattered and lack theoretical underpinning. This exploration is needed especially that institutions in the sector has been upgraded to the status of universities; and thus, attracting and retaining highly skilled academic staffs remains key.

Research approach/design and method: Using organisational equilibrium theory, this qualitative research drew primary data from four technical universities through semi-structured interviews and applied the thematic analysis technique.

Main findings: Although Ghanaian technical universities are making considerable effort towards the development of feasible retention strategies to retain academic staff, the evidence points to the role of two major sets of factors (work-related and economic factors) that form the crux of managements’ strategic policy response.

Practical/managerial implications: Work-related and economic factors were the main factors that encourages retention of academic staff of Ghanaian technical universities. Retention strategies of technical universities should be deepened and correspond with the recognised factors that enhance academic staff retention.

Contribution/value-add: This study, with the findings, articulates retention strategies of technical universities which can be adopted to retain highly skilled and talented academic staffs. The body of knowledge on retention strategies is extended from both empirical and theoretical perspective.

Keywords: retention; qualitative study; technical universities; Ghana; higher education.

Introduction

Over the last three decades, the higher education sector in Africa, in general, has undergone major changes, including a marginal increase in the level of funding, significant improvement in infrastructure, the establishment of additional higher education institutions, an increase in access to higher education and improvement in research culture (Abugre, 2018; Selesho & Naile, 2014). However, the recurring narrative on retaining academic staff has become imperative in recent times as a result of increasing academic staff turnover rates in higher education institutions across developing countries, and particularly in sub-Saharan Africa (Lata et al., 2021; Matimbwa & Ochumbo, 2019; Saurombe & Barkhuizen, 2022). The rising enrolment in higher education institutions supported by increasing access to higher education emphasises the need for retention and further attraction of academic staff members to meet the rising demand. The merits of academic staff retention are at the core of tertiary education in delivering its mandate for national development (Sodirjonov, 2020). Extant literature suggests that the retention of talented academic staff members contributes to building a country’s human capital (Jafari-Sadeghi et al., 2020; Sodirjonov, 2020). The increasing access to tertiary education has been constrained by higher turnover rates with several consequences, including to fill vacant positions (Al-Khrabsheh et al., 2018; Idiegbeyan-Ose et al., 2018).
Over the years, successive governments have paid little attention to issues of employment conditions, turnover intentions and the retention of academic staff in Ghanaian technical universities (Kwami, 2001). The effect of poor funding as well as other challenges has been highly associated with academic staff turnover and a shortage of skilled and qualified staff, which directly affects the quality of graduates produced (Amedome & Fiagbe, 2013) and other educational outcomes. Higher education in sub-Saharan Africa has been noted to be fraught with institutional governance weaknesses and infrastructure deficiencies which worsen the retention of academic staff (Abugre, 2018). Retaining academic staff becomes difficult in the light of the lack of institutional and executive will to curtail the numerous challenges eminent in tertiary institutions. According to Mushemeza (2016), these institutional weaknesses and deficiencies are peculiar to institutions of higher learning in Africa. Consequently, there is a continuous turnover of academic staff from universities in the sub-regions to the diaspora, the corporate sector or other civil society groups (Mushemeza, 2016). The compounding challenges of retaining academic staff present a challenge for governments and administrators of tertiary institutions to remedy. Selesho and Naile (2014) asserted that the decline of quality academic staff in higher learning institutions affects the prospects and the potential for building relevant knowledge and learning. The literature demonstrates that organisational citizenship and compensation of academic staff are crucial factors in retaining academic staff (Erasmus et al., 2015). Furthermore, the demands of the profession as a result of low student–lecturer ratio, poor facilities and heavy workload lead to most academic staff defaulting on promotion and building capacity and resorting to leaving the profession (Abugre, 2018; Selesho & Naile, 2014).

The research gap

Prior literature provides an understanding of conditions of employment and other work-related environmental factors that influence employee turnover, job satisfaction and staff retention (Kurniawaty et al., 2019). Morrell (2016) contended that because the problem of recruitment and retention is market-driven, salary-based solutions contribute to employees feeling satisfied with their conditions of employment. Lewis (2015) argued that some degree of turnover is unavoidable; nevertheless, high rates of employee turnover have both cost implications and affect the institutional reputation and the quality of learning and teaching. Implicitly or explicitly, the expertise base of technical universities may be eroded through the attrition of academic staff. Most studies conducted in different contexts have produced contradictory findings on the impact of conditions of service on staff retention and job satisfaction. These findings may have been influenced by different variables (Theron et al., 2014). The nature of the overall employment conditions in technical universities in Ghana may differ markedly from work conditions in other institutions and hence produce different influences on the overall organisational culture and behaviour (Van Zyl, 2019). Furthermore, an important limitation of prior studies is that they did not examine specific retention strategies designed and implemented to retain critical or core academic staff, particularly in the context of higher education institutions (Selesho & Naile, 2014). Another limitation of prior literature is that turnover and retention studies have largely employed quantitative methodology; qualitative studies remain a blind spot in the literature, especially within the settings of developing countries in sub-Saharan Africa (Dehlor, 2006). This study thus draws on organisational equilibrium theory to address an important literature gap by examining the retention strategies Ghanaian technical universities deploy towards the development of appropriate retention strategies. The article addresses three key research questions:

1. What is the nature of Ghanaian technical universities’ academic staff retention strategies?
2. To what extent do Ghanaian technical universities’ retention strategies align with factors that breed staff turnover?
3. How can Ghanaian technical universities design retention strategies to correspond with factors that breed academic staff turnover?

The contribution of this article to the turnover and retention literature is threefold. Firstly, this study contributes to the turnover and retention literature by establishing the factors that may breed academic staff turnover and management strategic policy response. Secondly, this study contributes to the turnover and retention literature by offering feasible retention strategies identified to reduce academic turnover. Finally, using the organisational equilibrium theory, the study contributes to the existing repository of literature and profession for employee retention.

Organisational equilibrium theory

The theory of organisational equilibrium can be traced back to the late 1930s from the work of Barnard in 1938, and that of March and Simon in 1958. This theory argues that employees’ turnover intentions, satisfaction and retention can be influenced by the prevailing conditions of employment and other forms of organisational inducements (Finster, 2013; Morrell, 2016). Organisational equilibrium theory opines that there should be a balance between the main employee turnover drivers and organisational inducements to reduce employee turnover intentions and ensure the survival of the organisation. March and Simon (1958, p. 99) in their model of determinants of labour turnover suggest that ‘employees’ satisfaction with their organisations is the main force that affects their perceptions of the desirability of movement’. Organisational equilibrium posits that the propensity of employees to exit an organisation can be reduced by increasing inducements. Overall, employees’ intention to leave is determined by two underlying factors, namely, ‘perceived desirability of movement’ and ‘perceived ease of movement’ (job satisfaction), and is based on the assessment of perceived alternatives or opportunities (Singh & Loncar, 2010). Primarily, most people will initially evaluate and compare their current jobs with accompanying prospects and organisational
inducements before leaving their current jobs and engaging in job-search activity (Hom et al., 2017; Morrell, 2016). In a case where the organisational inducements (e.g. training and development, supervisory support, good working conditions and reward systems) are greater than the individual’s contributions (e.g. time, knowledge, efforts and skills) to the organisation, the individual worker will stay with the current job (Lee et al., 2017). Organisations can manage turnover cases by ensuring a balance between the employees’ contribution and organisational inducement equation.

The interplay between incentives and contributions will determine the employees’ level of satisfaction and dissatisfaction, and their decision to either stay with the current job or leave (Singh & Loncar, 2010). Prior literature argues that intrinsic and extrinsic motivational factors collectively contribute to the overall satisfaction and retention of employees in an organisation (Tarcan et al., 2017). Therefore, there exists a direct correlation between management inducements and staff turnover rates and retention. Singh and Loncar (2010) found that although pay satisfaction affects employees’ turnover intent, employees’ job satisfaction is a more crucial factor that influences turnover intentions. Conversely, academic staff, particularly ageing staff, may find career change difficult and thus remain at their institutions. This ample evidence suggests that employee turnover and retention may or may not be determined by job satisfaction or dissatisfaction (Pop-Vasileva et al., 2011).

March and Simon (1958) are considered both the inheritors and promoters of the social system school of thought in employee turnover research. They attempted to integrate the labour market with individual decision-making and behaviours. The central idea espoused in the theory of organisational equilibrium is that every action and motive of an organisation should seek to reach and maintain equilibrium. The following are the underlying postulates of an organisation’s equilibrium:

- An organisation is a cooperative system that consists of different individuals with interrelated social behaviour.
- Each individual receives inducement for contributing towards the survival and existence of the organisation.
- Individuals continually contribute to the existence of the organisation when the inducements received are greater than their contributions.
- The contributions from various individuals are the source from which the organisation generates inducements to pay others.
- Equilibrium or solvency occurs when the organisation can continue to provide inducements to members for their contributions.

Maintaining equilibrium is the responsibility of management. A state of equilibrium is achieved when managers ensure a balanced fit between competing individuals and general interests or between organisational needs and the satisfaction of personnel within the organisation (Froese, 2017). Job satisfaction or dissatisfaction determines employees’ decision to stay and participate in their organisations’ activities. Employees who are more satisfied with their jobs and do not have alternative jobs would rather stay and participate in the organisational activities and processes (Lee et al., 2017). March and Simon (1958) derived their conclusion from the model of influence processes in organisations and argued that an organisation is an interrelated system, which comprises social behaviours of various subgroups of actors and participants. These subgroups co-exist in the organisation and work collectively in diverse ways and make different contributions to ensure the survival of the organisation (Matimbwa & Ochumbo, 2019). These subgroups make one of two decisions. The first is the decision to participate in the processes within the organisation. Employees’ attitude towards the job is the key factor that influences their decision to participate. Individuals’ decisions to participate are based on a reasoned estimation of the exchange between their contributions and the inducements received from the organisation. Second, the decision made by employees to participate in organisational activities is a result of the inducements received from the organisation (Morrell, 2016). While inducements are responsible for employees’ decisions to continue contributing to the development of the organisation, other evidence points to remuneration (Frye et al., 2019).

Organisational members presumably seek to optimise their net equilibrium of satisfaction over dissatisfaction to stay with their current organisation. If the expectations of a member result in net dissatisfaction over satisfaction, the member is more likely to leave their current position. The theory emphasises the need to balance employee contributions to the organisation and the inducements received by the employees (Hom et al., 2017). Job satisfaction is derived from the organisational inducements and is a function of several factors. There should be congruence between contributions and inducements for employees to remain with an organisation. Organisational inducements refer to valued outcomes (both tangible and intangible rewards) that employees receive in exchange for their contributions to the organisational success and overall development. This exchange must benefit both the organisation and the individual to serve as the basis for a stable organisation. Employees must prioritise inducements received from the organisation over their contributions to the organisation. In contrast, the organisation must place a higher value on the individual contributions received than on the inducements provided in exchange for the individual contributions (Hom et al., 2017). Organisations provide various forms of inducements to workers in reciprocity for actual and expected contributions from these employees. Employees, therefore, receive different levels of organisational inducements because of differences in jobs and in structural and relational positions, as well as the degree of managerial support. These differences in the extent of inducements received by individual employees may breed different perceptions and organisational commitment (Morrell, 2016; Shin et al., 2012).
The survival of an organisation depends on its ability to induce and succeed in arranging payment packages for its employees in order to motivate their sustained participation and contribution (Morrell, 2016). When the organisational inducements are greater than the individual’s contributions to the organisation, the individual worker stays with the current job (Mowday et al., 2013). Organisations can manage instances of turnover by ensuring a balance between the employee’s contribution and organisational inducement equations. Organisations estimate the economic values and the desired level of employees’ contributions, reinvest their contributions and consequently reward them to motivate their continued contributions (Subramony et al., 2008). This view corresponds with social exchange and reciprocity, which suggests that both the organisation and employees are engaged in a battle of exchanging inducements and contributions. Within this setting, management seeks to lure employees by maintaining a balance between the contribution and inducement mechanisms. The value and care shown by a supervisor to an employee for their contributions and well-being will result in the employee’s commitment to the success of the organisation (Kang & Kim, 2014).

**Methodology**

**Research design**

Qualitative research designs facilitate the interpretation of relationships between variables and support the assumption that real-world events must be interpreted through the perspectives of the participants being studied. This assumption presupposes that a qualitative research approach is more appropriate, meaningful and useful for studying and interpreting cases in the social world (Creswell & Creswell, 2017). In the domain of qualitative research design, it is assumed that reality is subjective and that human beings construct meaning based on their understanding and the social reality within their local context. Moreover, qualitative research orientation is premised on the idea that a phenomenon has multiple realities and meanings, depending on the researcher, and that these realities and meanings are co-created by the researcher and the participants. Following a qualitative research design, we applied the multiple case study strategy which allows for a relatively exhaustive and intensive study of a phenomenon in order to obtain details about that phenomenon from which triangulation can be achieved. Multiple case studies enable the identification, exploration and explanation of behavioural patterns of participants (Yin, 2017). According to Verschuren (2003), the case study research strategy investigates a social phenomenon in a holistic manner.

**Case and participant selection**

Ghana has established 10 technical universities in its various political regions, out of which four technical universities were chosen for the social unit of analysis and institutional context (see Table 1).

Using a non-probability sampling technique by means of purposive sampling, academic staff, union representatives, and ex-academic staff and registrars in charge of human resources (HR) were selected. The purposive sampling technique involves constituting a sample based on the researcher’s judgement. In the context of this study, the researcher’s judgement was such that respondents who occupied key positions and would be able to provide the needed information were involved. The purposive sampling technique ensured that the data collected were robust to answer the research questions. This is because the intentional selection of participants ensured that participants who had significant exposure or experience of the phenomenon investigated in the study were selected (Johnson et al., 2020). Table 1 presents the sample and participants that were interviewed, whereas Table 2 reports the demographic characteristics of the participants.

**Data collection**

A semi-structured interview was conducted with HR managers, trade union members, academic staff and former academic staff of the respective technical universities. Interview questions were developed based on the research questions. Interview sessions were recorded with a voice recorder and later converted into a textual Microsoft Word™ document format, coded and managed together with the interview data using the Nvivo™ software. Interviewees’ verbatim transcripts were prepared immediately after each interview was completed and returned for comments; yet all participants maintained their position and provided no comments. The interview was conducted one-on-one and face-to-face with the leading researcher where each session averagely lasted 40 min. None of the participants refused or repeated the interview. The authors thoroughly evaluated the data collection instrument. Further, in appraising the validity and reliability of the data collection instrument, a

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<td>Sunyani Technical University</td>
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pilot study involving three participants was conducted to check for errors. By means of triangulation, codes and themes that emerged were presented and cross-checked by other experienced investigators in the research area for credibility, reliability and consistency.

Data analysis
The study used the thematic content analysis (Saunders et al., 2019). This approach involves undertaking a search for themes in the interview transcripts or field notes. The frequency of occurrence of certain words or phrases serves as a common metric for generating themes. Initially, the researchers examined the various codes that depicted central patterns. The coding was done by writing marginal notes and placing labels on the interview transcripts to indicate portions of the data that could be categorised and ‘thematised’. Large volume of textual interview transcripts was reduced to capture only critical information. The coding generated clusters of meaning, which provided the means for determining general themes from the textual data. These themes were presented for further expansive qualitative interpretation. The themes provided the basis for organising, presenting and interpreting the remaining data in the study. The frequency of occurrence of certain words or phrases serves as a common metric for generating themes. The next step in this approach involved noting themes that were common to all or most of the interviews conducted. Further, the researchers noted whenever themes occurred only in a single interview or in a minority of the interviews in the four case study sites, similar themes were fused together into a main concept. Using this procedure accounted for the prominence given to some themes over others. This approach was widely used in both the within-case and cross-case analyses to generate the various themes.

Ethical considerations
Data were collected in 2018 at each participant’s private office after ethical clearance was obtained (Approval number: HRE2017-0709). The proposal met the requirements described in the National Health and Medical Research Council’s (NHMRC) National Statement on Ethical Conduct in Human Research (2007).

Results
While the findings are presented based on the organisational equilibrium theory, the themes were derived from the data. Inducements are given to employees to promote their continued participation in making contributions to the existence of an organisation (Cañibano et al., 2022; García et al., 2021). Technical universities, unlike private and traditional universities in Ghana, are currently not well endowed with various attractive packages, a satisfactory work environment and the appropriate physical infrastructure. Nevertheless, employees expect incentives in return for their contribution to their institutions. The findings are categorised into themes and aggregated into work-related and economic dimensions. Thus, from the data, work-related and economic factors were the main factors that encourage the retention of academic staff.

Work-related factors
This study found that the management of technical universities use various kinds of work-related inducements with the aim of improving the working environment in order to retain academic staff. Prior Human Resource Management (HRM) literature highlights that academic staff need a satisfactory and favourable work environment, which directly results in an increased commitment to the organisation (Mabaso & Dlamini, 2018). The themes under work-related factors consist of improved infrastructure and facilities, institutional collaboration, opportunities for career development and advancement, and flexible work arrangements.

Theme 1: Infrastructure and facilities
Evidence from the study suggests that for the past 4 years, most technical universities have made a significant effort to provide improved physical infrastructure and facilities. Participants highlighted the provision of some state-of-the-art classrooms, engineering equipment, laboratories and office space. Unlike previously, these new and emerging infrastructures are well ventilated or air-conditioned, and most of the recently built lecture halls have the capacity to accommodate a large number of students. The participants further noted that the provision of academic facilities such as office space, lecture halls and projectors is an important improvement in the work environment, albeit the rate of infrastructural expansion and better facilities are still inadequate to meet the continuously increasing enrolment numbers of students. These improvements in the physical infrastructure are unevenly distributed throughout the various technical universities. For example, Accra Technical University and several others mostly located in the south have improved their infrastructure and facilities more than others. For instance, those technical universities located in the north highlighted unevenness in infrastructural development as compared to other technical universities:

‘GETFund [Ghana Education Trust Fund] has put up very beautiful structures; I mean so many structures but the latest is the faculty of engineering block. Very beautiful, very big, ventilated, air-conditioned and most of the lecture theatres are opened to make them more legal to accommodate the intake of ventilation. And lighting is provided adequately to cater for lectures. So, this one, we don’t have problems with structures.’ (Participant 5, 56, Male, Lecturer)

Participants stated that the recent construction of lecture halls and office space funded by the Ghana Education Trust Fund (GETFund) had improved their working environment, which allowed them to work freely without a sense of difficulty and frustration, although they believe more is still required. Some participants indicated that since being appointed as academic staff some years ago, they had been
sharing the general staff common room, but recently, they were allocated office spaces with only one or two colleagues. Although they would have preferred individual offices, they were happy to finally share an office with only one colleague, rather than share a staff common room with 35 colleagues. This improvement gave them some comfort and a sense of freedom. The recent upgrading of infrastructure, particularly lecture halls with modern ventilation systems, library facilities and office accommodation, has created a sense of belonging and interest in working in their institutions. Government’s commitment to support technical education, which had been relegated to second-class status after independence, has occasioned the recent upgrading of some infrastructure. This commitment, demonstrated by the recent improvements in technical universities, has made them more comparable to traditional universities:

‘So that in all, I have my laboratory and my condition of service is good. I have my workshop, I have my office, I have my key to my office, a computer is there, and the Internet is working. And when I move to the lab, the machines are working, and electricity is on. So, why should I leave? In any case, any work I will do here, it is the same amount I will be receiving if I leave here and go to Legon or KNUST. The same allowances.’ (Participant 16, 43, F, Lecturer)

Theme 2: Institutional collaboration

Institutional collaboration and teamwork create collegiality between higher education institutions and industry partners within Ghana and beyond towards the advancement of teaching and research outcomes. Technical universities are currently establishing institutional–industrial collaborations both in Ghana and abroad, especially with China, Japan and South Africa. The collaborations aim to create opportunities for academic staff to partner with other institutions to conduct research and source funding to support their teaching, research and career advancement. Participants noted that the technical universities had already created some networks in Ghana and abroad. Consequently, some staff are receiving financial and technical support to undertake research projects and have also benefited by upskilling themselves. A participant noted that through an institutional collaboration, he had travelled to China to participate in workshops and seminars. Another important dimension of institutional collaboration occurs when memoranda of understanding between Ghanaian and international higher education institutions are reached (e.g. with China, Italy, the United Kingdom and the Netherlands). These memoranda assist in training academic staff to complete terminal degrees to meet the required teaching standards for universities. These collaborations have increased the number of academic staff with degrees in the past few years:

‘The institution is also liaising with other sister institutions both within and outside to grant scholarship packages for our teaching staff; and we have got one sister institution in China which in the past three years has granted not less than four full scholarships to our staff in the courses of IT.’ (Participant 2, 48, M, HR manager)

Theme 3: Opportunities for career development and advancement

Participants from all the technical universities demonstrated some convergence in their responses on the provision of training and special career growth and development initiatives to ensure they build the required human capital and retain staff. Technical universities need to build the capacity and increase the number of academic staff with terminal degrees to increase their contribution to the core activities of technical universities. Recently, technical universities have demonstrated significant commitment by allocating internally generated funds (IGF) to support career development through offering scholarships and reimbursement of school fees to their academic staff. These internal sponsorship arrangements have helped some academic staff upskill and remain committed to their institutions after benefiting from such career development initiatives:

‘Yes, some of them you see, for instance, we have the academic progression. Postgraduate studies and things. There is an opportunity if you want to progress the school can sponsor you. So currently we have about more than 20 people who are pursuing a PhD and the school is sponsoring them. Some partially, some fully. So, some people are going to stay to enjoy this benefit. So, they would not go.’ (Participant 9, 38, M, HR manager)

Academics from the four universities acknowledged that currently many academic staffs are given the opportunity to pursue further studies, which demonstrates the universities’ commitment to supporting staff advance their careers. The study found that the management of technical universities were enthusiastic and committed to take advantage of the partnerships established with other universities both in Ghana and abroad to ensure that many of their academic staff undertake their terminal degrees:

‘As I said, the institution is doing a lot when it comes to staff development. Within the last three years, a lot of people have had the opportunity to further their education and then [gain] promotions.’ (Participant 26, 51, M, HR manager)

Another special career growth and development initiative within the various technical universities was establishing memoranda of understanding with the GETFund to sponsor academic staff to pursue doctoral studies in Ghana and abroad. At the time of the fieldwork, more than 100 academic staff out of eight Ghanaian technical universities were undertaking doctoral studies in various research fields. These special initiatives supported technical universities in upgrading the qualifications of their academic staff between 2013 and 2017, which has helped retain some academic staff. This management approach to academic staff development forms part of the broader strategies of talent management towards reducing the rising tide of academic staff turnover and helping tackle the problem of insufficient qualified academic staff in the Ghanaian education labour market.

Technical universities in Ghana are greatly challenged with the turnover of their competent and experienced staff to
private and traditional universities. The study found that academic staff sponsored to undertake further training and development opportunities were contracted or bonded by management to remain with and serve the technical university on completion of their studies for a specified number of years. Bonding is a staff retention strategy pursued by the management of the four selected universities. Bonding aims to limit the mobility of sponsored academic staff.

An HR manager explained:

‘Once you are granted study leave, the first thing is to bond you and you have to accept the terms and condition of the bond before you are allowed to go or else it could be revoked.’ (Participant 10, 47, F, HR manager)

The bond is a legal contract between the applicant and the management of a university signed in the presence of three guarantors who are held accountable if the applicant fails to return after studies. The number of years for the bond is determined by the duration of the training programme. Staff members must fulfil all the conditions of the bond before they can leave. Some beneficiaries have been able to violate their contractual agreement because most technical universities fail to police such breaches. Sometimes, beneficiaries completed their studies and failed to return to their institutions to serve the bond conditions, and also failed to pay back the funds. A few secured better jobs elsewhere to work and paid off the funds. The study further revealed that technical universities provide a more flexible promotion system than traditional universities: the evidence suggests that academic staff members in technical universities are promoted to senior lecturer or professorial ranks faster than their counterparts in traditional universities.

A participant stated:

‘This school does well regarding appointment and promotion. Within a short time, they have been able to promote a lot of lecturers to senior lecturer status. And most of them are very happy. It’s not easy getting senior lecturers status in any other public universities or traditional universities but this place has provided a condition for them and that is one.’ (Participant 15, 41, F, Lecturer)

Human resource participants from all the selected universities revealed that management used promotion and appointment to serve in various capacities (e.g. heads of department and committees) as an organisational inducement strategy to motivate staff members both financially and non-financially. Serving in different administrative roles comes with significant financial rewards in most tertiary education institutions. Many academic staff members are influenced by the large financial benefits to declare their interest and desire to serve. The opportunity for academic staff members to take up administrative responsibilities may induce many to stay. They are less likely to move to new institutions where they might wait for a few years for the opportunity to serve in such lucrative administrative capacities. Moreover, the main criteria for selection of these positions are seniority and years of service in the institution. Serving in these administrative capacities further strengthens academic staff members’ opportunities for promotion. These roles are rotated to ensure that all academic staff members benefit from such responsibilities by increasing their chances of promotion. It was also revealed that management in technical universities have demonstrated a strong commitment to fast-tracking administrative procedures in the promotion process. Management ensures that academic staff members with the required publications and teaching evaluations, together with some level of community service, pass through the process without the difficulties and delays previously perceived by many staff members. These acts to support academic staff in their career advancement were alluded to by participants as an important incentive to stay:

‘Apart from training and development, appointment or promotion is also another key factor as far as the institution is concerned; we don’t want to delay the promotion of staff.’ (Participant 1, 42, F, Lecturer)

**Theme 4: Flexible work arrangements**

Some participants argued that they stayed with the technical universities because of the flexibility in carrying out their duties and responsibilities that supports work–life balance and work–family balance:

‘Somebody teaches the regular time like this and after 4 o’clock the school has closed. So, all those who come to school after 4 o’clock, that 4 pm to 9 pm they are more like what we call the parallel program or evening program. They have paid tuition and the tuition fee components are shared for the teachers and the department that engages those teachers. So, if somebody is able to teach in this program, the person is getting the money. These are institutionally induced and once you go to someplace if you go to the departments with higher numbers, they are happy in those areas. Because at the end of the semester somebody can be making 10,000 from that one alone. Somebody can be making 8000 from that one alone. So that is good for the person. This is institutionally induced.’ (Participant 14, 56, M, Lecturer)

Flexibility in work arrangements also offers financial benefits when academic staff engage in part-time work with other institutions. Some academic staff members have limited teaching allocations, which give them the opportunity to teach in other universities and undertake their private business activities. Participants indicated that work flexibility was something that frequently influenced their decision to stay. They believed that this flexibility may not exist in other industries or traditional universities. For example, some participants said that they earned between US$1000 and US$1500 (GHC800–GHC1000) from part-time teaching. For them, this was sufficient motivation to stay in a technical university with a flexible job schedule. Although this arrangement generally reduces work hours in these technical universities, management have relaxed some policies regarding full-time academic staff commitment. They generally choose to ignore the practice of staff having second jobs to allow their staff to explore other business opportunities.
The staff can then generate additional income to supplement their wages, which are considered low compared to the wages of their counterparts in traditional universities. The study further noted that technical universities have introduced weekend and evening school programmes targeting full-time workers. Programmes are offered alongside the regular programmes. Lecturers who teach these programmes are paid as part-time staff. Academic staff members were willing to do extra teaching in these programmes as it provided additional income, which led staff members to compete for the positions:

‘We have what is called part-time teaching that people always fight on it. People are prepared to teach more in the evening and in the weekend programs because it gives them more money. Because the institution has made it in such a way that the fees that are paid for the evening school, they put what they call tuition fee on it. So, all the tuition fees are for the teachers who will teach in the evening program. So, this is institutionally induced form of an allowance.’ (Participant 7, 37, M, Lecturer)

**Economic factors**

Universities have offered attractive financial inducements such as subsidised accommodation facilities for academic staff in a bid to support and retain them. The current organisational inducements used to persuade academic staff to remain are broadly categorised as ‘economic factors’ and comprise three themes.

**Theme 5: Financial incentives**

Technical universities support staff with loan schemes to purchase vehicles or offer vehicle allowances. Generally, the interest rates charged by Ghanaian financial institutions compelled university management to grant loans with low interest rates to their academic staff to eliminate difficulties in obtaining bank loans. In addition, participants explained that management gave them rental loans for which the repayment arrangements were very flexible:

‘I have talked about car loans. It’s not easy if you go to the bank to borrow to buy a car. The interest rate is very high but the car loan that we give here the interest rate is very low. So that is the motivational factor. Aside from that, the rent loan is also subsidised. So, all these things put together will motivate staff to stay or may induce them to stay, because if you know you have worked for more than three years they can sponsor you to go for further training. Then another one is fuel allowance and car maintenance allowance to staff. These are being paid every month so there is regular payment in addition to their salaries. These are specific things that are implemented.’ (Participant 17, 49, M, HR manager)

**Theme 6: Subsidised accommodation**

Although not very attractive compared with the accommodation facilities offered by traditional universities, the evidence suggested that employees of technical universities who are given a residential facility do not want to leave. Management of the selected institutions helped their academic staff to overcome the difficulty associated with obtaining accommodation, which has become a national challenge:

‘Well, some of them, you know conditions in Accra is [sic] very difficult. Very hard, so some of them they have accommodation here, so when you compare accommodation, city accommodation outside and here you might think that this place is better. Accommodation is not easy to come by at the university. And then we have other soft loans and other things that they receive from the institution. So, accommodation is one of the factors that have made the staff stay. The accommodation has also contributed to retention.’ (Participant 28, 45, M, HR manager)

The study also revealed that the management of technical universities have implemented several measures to ensure that accommodation and housing facilities are available. Through the introduction of the owner-occupier policy, management pay an allowance to academic staff who live in their own residential properties. In addition, management lease some residential properties for use by academic staff and deduct the lease amount from their monthly salaries:

‘We also introduce rent loan that we give loans to the staff at a subsidised rate so that they can rent their own accommodation. And are also trying to introduce what we call owner-occupier so that if you have your own houses, we can give you some allowance, at least, and that will motivate others to put up their own houses to reduce stress on the few that we have.’ (Participant 7, 43, M, HR manager)

**Discussion**

The evidence from this study supports assertions in favour of factors and conditions that directly and indirectly influence and affect employee retention. From the exploratory investigation, the retention of academic staff in Ghanaian technical universities over the years has been influenced by two key sets of factors: work-related factors and economic factors. Effective employee retention strategy results in heightened morale within the workplace among the existing workforce (Matimbwa & Ochumbo, 2019). Retention increases productivity, which in turn affects overall organisational success (Morrell, 2016). The HRM literature posits that job dissatisfaction and turnover are lessened when employees receive appropriate and adequate incentives for their contribution (Audenaert et al., 2019). Generally, Ghanaian technical universities are making a considerable effort towards the development of feasible retention strategies to retain academic staff. The evidence points to various institution-specific and higher education sector-targeted initiatives as well as management strategic policy responses that encourage academic staff retention. These initiatives have resulted in moderating Ghanaian technical universities’ academic staff turnover rate over the past decade.

Aside from the institutional-specific and management strategic policy responses, improved infrastructure and facilities, institutional collaboration, opportunities for career advancement and flexible work arrangements were the key work-related factors employed by the management of Ghanaian technical universities to induce their academic staff to stay. On the contrary, poor work environment can lower employees’ levels of job satisfaction and culminate in intentions to quit (Kinman, 2016). In contrast, improving the
conditions of employment heightens employee motivation and job satisfaction, which helps retention (Al-Hamdan et al., 2017). Conditions of employment are critical to employees’ decisions to either stay or quit (Miller Jr, 2017). The study found that most technical universities have recently made some progress in improving their physical infrastructure and other key facilities. For example, GETFund was established with a sole purpose of improving infrastructure in Ghanaian educational institutions. The fund has over the years helped improve infrastructure in many technical universities. In addition, management of technical universities have also demonstrated commitment in tackling the poor state of infrastructure and other facilities, including equipment, laboratories and office spaces. The government’s and university management’s commitment to improve infrastructure was visible in some ongoing projects and the purchase of some state-of-the-art equipment and materials to enhance teaching and learning.

The limited human capital in Ghana has forced technical universities to develop institutional collaborations to offer training opportunities in order to upgrade the capacity of academic staff to meet the standards of higher education and improve teaching and research outcomes (Adjei et al., 2014). This study highlighted how Ghanaian technical universities are engaging in partnerships and signing memoranda of understanding with institutional and industrial collaborators, both in Ghana and abroad, to improve research outcomes, increase access to funding and advance career prospects of academic staff. Prior evidence maintains that institutional collaboration and teamwork create collegiality among employees and help improve group cohesion and staff retention (Finster, 2013). The study found that academic staff without terminal degrees could advance their academic studies to acquire terminal qualifications, which in turn increase their commitment and job satisfaction. As part of management career development initiatives, a memorandum of understanding between all technical universities and the GETFund to sponsor academic staff to pursue doctoral studies in Ghana and abroad has been established. In addition, the study also found that technical universities are using IGF to support their academic staff to pursue further studies. These sponsorships ranged from study leave with full pay to full or partial payment of tuition fees, which was generally administered as a reimbursement programme. For the past few years, these special career development initiatives have supported technical universities in upgrading academic staff qualifications. Bryant and Allen (2013) indicated that employees who believe that there are opportunities for future career growth and advancement are more likely to stay even if they are thoroughly dissatisfied with their job and their present circumstances.

Academic staff workloads and retention are intricately related. Prior evidence highlights that a flexible work structure constitutes an important determinant of employee satisfaction and their decision to stay with an organisation (Hausknecht et al., 2009). Similarly, job autonomy and flexibility have been used to induce academic staff to stay with technical universities in Ghana. A high level of flexibility in job scheduling motivates staff to stay. Kenny and Fluck (2014) argued that job flexibility and autonomy act as intrinsic motivators that attract academics to seek university careers.

Management of Ghanaian technical universities occasionally offer economic incentives as part of their organisational inducement strategies to retain academic staff. These incentives include attractive financial incentives and subsidised accommodation facilities. Various financial incentives such as low-interest loans to purchase vehicles and household equipment and car allowances were granted to academic staff to encourage them to stay. The HRM literature states that various financial and non-financial inducements can boost employee morale, job satisfaction, organisational commitment and retention (Asante, 2015; Banerjee & Nayak, 2018). In addition, there is the creation of a provident fund to complement the Social Security and National Insurance Trust retirement package which increases staff job satisfaction and engagement. The HRM literature posits that financial incentive is an effective reward system and motivator to retain employees in their workplaces (Jansen & Hlongwane, 2019). Generally, Ghanaian technical universities lack basic facilities, including accommodation for their staff, which promotes the drift of their staff to traditional universities with better infrastructure. Accessing affordable and decent accommodation in Ghana, particularly in urban locations, has been challenging because of the housing deficit (Owusu-Ansah et al., 2019). Therefore, management of these technical institutions support staff to access appropriate accommodation as part of their retention strategy. Some technical universities have built a few residential facilities for academic staff on university campuses while negotiating with private residential owners for accommodation for academic staff off-campus.

**Practical and managerial implications**

The implementation of retention policies and plans has several beneficial implications for academic staff retention in Ghanaian technical universities. Ghana’s educational development history highlights the level of uneven development between the North and the South of the country. Infrastructure linked to growth and development is still concentrated in institutions in the South to the detriment of those in the North (Poku-Boansi & Amoako, 2015). The government must support the funding of infrastructure projects in the North of the country for inclusive development to support academic staff retention in technical universities located in that part of the country. For example, technical universities located in northern Ghana should be resourced with state-of-the-art laboratories similar to technical universities located in the South. Nevertheless, technical universities should endeavour to lobby government to ensure that development also reaches the northern sector in order to alleviate employees’ perceptions of such phenomena (Varela & Harré, 1996). For an effective retention strategy, there should be the need to address negative managerial
outcomes that do not support academic staff retention. Thus, an effective retention strategy requires structured policy intervention around, for example, addressing issues of fairness, transparency and special interests during major decision-making is important (Toxopeus et al., 2020). Such policies would help eliminate perceived and actual conflicts of interest and perceived favouritism in the distribution of incentive packages, such as granting of loans, subsidised accommodation and career advancement opportunities. Technical universities may need to develop strong national guidelines and procedures around promotions, granting of loans, allocation of accommodation and recruitment to ensure transparency and fairness. Nepotism, favouritism and tribalism are minimised when there are clear codes of conduct and policies relating to sensitive issues around people management (Safina, 2015). The promotion system of technical universities should be based on merit without compromising trust and transparency in the system of administering promotions. Vice chancellors of the institutions should encourage strict adherence of appropriate policies. This would elevate the trust and confidence in management among academic staff in their institution.

Further, although technical universities have some attractive incentive packages, retention strategies should be reconciled with that of traditional universities to address the stack disparity prevalent between technical universities and traditional universities in Ghana. Such disparities create disaffection and disregard for fairness. Importantly, the recent upgrading of technical universities in Ghana represents some signs of development and recognition of technical education, which means technical universities should now be able to operate in a similar capacity as mainstream traditional universities. However, this demands a proactive management approach to push the frontiers of development of their respective universities to improve infrastructure and address the historically low status and recognition of technical education. For success, management must demonstrate visionary and distributed leadership to meet the needs and career aspirations of employees and spearhead the advancement of technical universities. This approach is important for decision-making and paving the way for ameliorating procedural injustice in the administrative system.

Conclusion

The findings of this study have several implications for both university management and government policy for developing appropriate staff retention strategies for Ghanaian technical universities. The study makes a significant contribution to the extant literature and managerial practice for employee retention through the lens of organisational equilibrium theory. Beyond this theoretical benefit, it expands the understanding and explanation of the inducement–satisfaction nexus among academic staff in technical universities in the Ghanaian context. It also sheds light on the fitness of employee contributions, organisational inducements and retention behaviour among academic staff of Ghanaian technical universities. It presupposes that situating this study within the organisational equilibrium theory can further equip organisational leaders with the requisite knowledge and understanding of how to adapt and respond to employee turnover. Further, from this exploratory study, we posit that a transparent and prioritised academic support initiative will go a long way to improve the professional growth and retention of academic staff.

Limitations

This study has some limitations. This study applied the organisational equilibrium theory. However, the theory is dependent on utilising organisational inducements to retain academic staff. Motivation and satisfaction theories also highlight several factors that could explain academic staff’s turnover intentions. Thus, the organisational equilibrium theory provides some limited view of the research problem under investigation. Further, using four out of 10 technical universities partially depicts the retention issues eminent in all technical universities. Future studies can include all technical universities to appraise the phenomenon under investigation comprehensively.

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Competing interests

The authors have declared that no competing interests exist.

Authors’ contributions

E.N.K. wrote the manuscript with support from M.A. and E.A. E.A. wrote the methodology while E.A. reviewed the literature and did the editing. E.N.K. conceived the original idea and the formal analysis.

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Data availability

The data used for this study will be made available upon request from the corresponding author [E.N.K].

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