

The Relation of Performance and Training and Development Activities in Selected Public Universities in Ghana

Victor Kwarteng Owusu, Ph.D.

Doctoral Thesis Summary

Doctoral Thesis Summary

The Relation of Performance and Training and Development Activities in Selected Public Universities in Ghana

Vztah výkonnosti a vzdělávacích a rozvojových činností na
vybraných veřejných vysokých školách v Ghaně

Author: **Victor Kwarteng Owusu, Ph.D.**

Study Program: P6208 Economics and Management

Study Course: 6208V038 Management and Economics

Supervisor: doc. PhDr. Ing. Aleš Gregar, CSc.

Examiners: prof. Ing. Miloš Čambál, CSc.
doc. Ing. Miloslava Chovancová, CSc.

Zlín, April, 2023

© Victor Kwarteng Owusu

Published by **Tomas Bata University in Zlin** in the edition **Doctoral Thesis Summary**.

The publication was issued in the year 2023.

Key Words: Training and Development, Work Conditions, Commitment, Human Resource Development Concept, Competence, Performance Appraisal, Ghanaian Public Universities.

Klíčová Slova: odborná příprava a rozvoj, pracovní podmínky, závazek, koncepce rozvoje lidských zdrojů, kompetence, hodnocení výkonnosti, ghanské veřejné univerzity.

Full text of the Doctoral thesis can be accessed in the main Library of Tomas Bata University (TBU) in Zlín.

ISBN 978-80-7678-173-3

ABSTRACT

Recently, organizations have come to a firm conclusion that human capital development is the source of competitive advantage and productivity, However, to achieve a competitive advantage, organizations must manage skill training and development to build on the competence of employees. Moreover, performance management is the most significant contributor to individual training and organizational development. However, to achieve a competitive advantage, organizations must manage skill training and development to build on the competence of employees. Again, effective training and development strategies help organizations to acquire competitive skills, abilities, and career development. Nonetheless, most of the studies conducted on training and development and performance rely on performance as dependent variable. However, the proposed thesis seeks to establish training & development as dependent variable in relation to competence-based performance appraisal in selected public universities in Ghana. Against this framework, the study seeks to fill the missing gap of the mediating role of commitment and the moderating role of investment in training and employee's intention to stay on employee commitment and training & development. The goals of the study were achieved by the involvement of both inductive and deductive explorations. The study adopted a scientific research design process, systematic review, interviews of managers, quantitative data analysis and clustering. A total of 365 out of the 410 respondents were digested with the application of structural equation modelling as statistical analysis technique. The study results have been analysed, discussed and a proposed contribution to theory, practice, academic and policy formulation with respect to training & development and competence-based performance appraisal and corresponding mediating and moderating variables have been elaborated profusely in the subsequent text. Limitations and future research directions are espoused.

ABSTRAKT

V poslední době, organizace dospěly k pevnému závěru, že rozvoj lidského kapitálu je zdrojem konkurenční výhody a produktivity, Nicméně, k dosažení konkurenční výhody, organizace musí odbornou přípravu a rozvoj stavět na kompetenci zaměstnanců. Kromě toho je řízení výkonnosti nejvýznamnějším přispěvatelem k individuálnímu vzdělávání a organizačnímu rozvoji. Aby však organizace dosáhly konkurenční výhody, musí odbornou přípravu a rozvoj dovedností, stavět na kompetenci zaměstnanců. Opět platí, že efektivní strategie vzdělávání a rozvoje pomáhají organizacím získat konkurenční dovednosti, schopnosti a kariérní rozvoj. Nicméně, Většina studií provedených na vzdělávání a rozvoj vnímají výkon jako závislé proměnnou. Předložená práce se však snaží zavést odbornou přípravu a rozvoj jako závislé proměnnou ve vztahu k hodnocení výkonnosti na základě kompetencí na vybraných veřejných univerzitách v Ghaně. V tomto rámci se studie snaží zaplnit chybějící mezeru poznání o zprostředkující roli závazku, moderační roli investic do vzdělávání a. Cílů studie bude dosaženo zapojením induktivního i deduktivního výzkumů. Studie přijme projekt vědeckého výzkumu, systematický výzkum rozhovory manažerů, kvantitativní analýzu dat a shlukování s aplikací modelování strukturálních rovnic jako techniky statistické analýzy. Výsledky studie budou analyzovány, diskutovány a následně bude formulován příspěvek k teorii, praxi a akademické oblasti s ohledem na odbornou přípravu a hodnocení výkonnosti založené na kompetencích.

TABLE OF CONTENTS

ABSTRACT	3
ABSTRAKT	4
2. UP-TO-DATE AND RELATED LITERATURE	7
2.1 Training & Development in Organizations	7
2.2 Competency-Based Performance Appraisal	8
2.3 Theoretical Underpinnings of The Research	9
2.4. Hypotheses and Model Development	11
2.5 Conceptual Framework of Variables Deduced from Literature	14
2.6 Stated Hypothesis	14
2.7 The Summary and Definitions of The Various Constructs	15
3. STUDY OBJECTIVES AND PROBLEM STATEMENT	16
3.1 Research Gap	16
3.3 Study Aims	17
4.1 Demographics and Data Collection Technique	18
4.2 Software and Data Analytical Tool	19
5. DISCOVERIES AND OUTCOMES	20
5.1 Measurement Model Confirmation	20
5.2 Hypothesis Testing with Partial Least Squares Structural Equation Modelling (PLS-Sem).	22
6. DISCUSSIONS OF THE RESULTS	27
6.1 Discussions and Related Outcome of the Results	27
6.2. Thematic Analysis of The Qualitative Report from The Heads of Administration and Heads of Department	27
7. CONCLUSIONS	31
8. CONTRIBUTIONS TO THEORY	31
8.1 Academic and Theoretical Importance	31
8.2 Practical and Managerial Importance	31
8.3 Study Limitations	31
8.4 Suggestions for Future Research.	32
REFERENCES	32

1. RESEARCH BACKGROUND

The growing acceptance of the strategic importance of human capital development in institutions has inspired researchers to examine the relation of competency-based performance appraisal and training and development (Alnawafleh et al., 2018; Amberg & McGaughey, 2019). An empirical investigation of this field focused on the relation between competence-based performance appraisal and training & development (Fink et al., 2017). Recently, organizations have come to a firm conclusion that human capital development is the source of competitive advantage and productivity, (McDowell et al., 2018). However, to achieve a competitive advantage, organizations must manage skill training and development to build on the competence of employees. Moreover, performance management is the most significant contributor to individual training and organizational development, (Habtoor, 2016; Saratun, 2016). Again, effective training and development strategies help organizations to acquire competitive skills, abilities, and career development (Sikora et al., 2016). Nonetheless, to improve the competence and performance of an employee, it is vital to create a culture of continuous training and development (Bag et al., 2020). Organizations use human resource practices as a critical strategic tool to improve the competence and performance of employees by leveraging their knowledge, skills, and abilities, (Nieves & Quintana, 2018). Employee training and development has been recognised as the most basic activity in strategic human resource management (SHRM), (Bratton & Gold, 2017; Noe & Kodwani, 2018). Academic institutions invest heavily in training and development activities annually to reap the benefits of employee competence and performance (Naim & Lenka, 2018). Nonetheless, not all these investments into training and development activities yield fruitful results of the competence and performance of the employee during appraisal (Noe & Kodwani, 2018). In fact, according to Boyd et al., (2018), the empirical evidence of the link between training and development and competency-based performance appraisal is mixed. Human resource development activities are designed to improve on employee capabilities to thus; improve efficiency and effectiveness. It is, therefore, relevant for organizations to take an interest in training and development as a conduit to build their human capital.

The researcher also seeks to look at the gaping hole of employee commitment and its impact on competency-based performance appraisal and training & development at tertiary in Ghana. Again, the researcher seeks to investigate the managerial decisions on investment in training amongst administrative staff at the various tertiary institutions and the impact on turnover.

2. UP-TO-DATE AND RELATED LITERATURE

Up-to-date and other related literature associated with the current theme together with the prime objectives and the relevant questions and previous work which informed the subsequent hypotheses development of this work are outlined and highlighted in this chapter.

2.1 Training & Development in Organizations

The most unique and valuable asset in any organization is its human capital, as such the costliest investment in the development of human resource management (C. Wang et al., 2020). Again, an insight into how to attract and retain talents is extremely imperative in sustaining of every organization (Martin, 2015). Competitiveness amongst organizations is as a result of current business situations encapsulated in globalization and technological advancement. To adjust to such a challenging environment, organizations must device a means of creating sustainable competitive edge. Consequently, skills, knowledge and capacity of employee has increasingly become paramount to employee performance, universal competitiveness and incessant development (Giudici & Filimonau, 2019).

2.1.1 Training & Development

Employee training and development is one of the aspects of human resource management practices. Organizational success depends on this most powerful tool. Training and development can be defined as building the capacity of an individual employee to the required state of efficiency and effectiveness through instructions processes and practices (Elnaga & Imran, 2013; Morrison et al., 2019). Training and development must be viewed as integral part of organizational strategy since it is important in maintaining the human resource base of every organization (Armstrong & Taylor, 2020). Overall, organizations that implement employee training and development programs proactively stands to benefits from its positive ramifications (Masri & Jaaron, 2017). According to Armstrong & Taylor, (2020), human resource management has gone through series of metamorphosis since the 20th century, which emanated from environmental and people factors with the aim of providing welfare for employees.

2.1.2 Overview of Training & Development in Academic Institutions

Even though, academic institutions by itself are training centres yet their employees require training and development to be able to execute their responsibilities. One of the fundamental concepts in human resource management is training. Moreover, training and development requires the building specific

skills to a preferred standard through teaching and practice (Bratton & Gold, 2017). The workforce of every organization must execute their responsibility with an appreciable expertise in order to reach a successful performance (Vveinhardt & Andriukaitiene, 2017). Although that is the fundamental reason for training and development yet, there are other definitions of training (E. Cohen, 2017).

2.1.3 Training and Development Challenges Amongst Administrators of Academic Institutions

University institutions are considered to be at the pinnacle of the human resource development chain which engenders the knowhow, competences and skills needed for modern day organizational management and performance, however, universities in Africa especially Ghana, face numerous challenges (MBITI, 2019). The most pressing one being capacity building amongst sections of the institutional structure especially, the administrative employees. One of the foremost core challenges in meeting the up-to-date skill set require by administrators to meet modern work demands (A. Khan & Masrek, 2017). Therefore, this has been the rationale behind the need for the universities updating the professional knowledge and skills for employees caught up in an institutional revival since that is their responsibilities (Korantwi-Barimah, 2015).

There has been a long-standing policy to allow for the upgrade of the skill sets of university employees in Ghana, nonetheless, the administrative employees are short changed as most the resources provided by these purposes are mostly allocated to lecturers and researchers (Pinheiro & Pillay, 2016). Management of the various public tertiary institutions in Ghana have realised the need to provide avenues amidst agitations and requests from the administrative staff, the requisite training and processes to develop and upgrade their skill set (Papanthymou & Darra, 2017; Sal & Raja, 2016). According to Korantwi-Barimah, (2015), the lack of laid down processes for sustainable training and development for the administrative employees of the various tertiary institutions in Ghana has prompted these employees to take their destiny into their own hands. Whereas, many administrative staff strive to upgrade themselves with their own resources in a bit to earn promotion, their counterparts in the field of research and lecturing have access to funds and resources provided through internally generated fund and government as the parent authority (Pinheiro & Pillay, 2016; Sal & Raja, 2016).

2.2 Competency-Based Performance Appraisal

2.2.1 Competency-Based Appraisal

One of the evolving terminologies in the human resource management practice is ‘competence’. Nevertheless, different people have different definitions for this

term (Wongnaa & Boachie, 2018). This assertion basically, depends on the organizational or institutional structure, as well as the labour processes (Wongnaa & Boachie, 2018). For instance, the ability to perform a particular job task or job role to satisfaction fix in the exact definition for competence, according to some researchers (Sanghi, 2016; Suryani, 2020; Wongnaa & Boachie, 2018). Moreover, the ability to achieve the main professional mission that characterise an occupation to acceptable level can be defined as competence (Quendler & Lamb, 2016; Sanghi, 2016). Again, competency is the ability to execute a responsibility successfully and efficiently or exhibiting the needed quality in specific subject matter which can be assessed (Sanghi, 2016; Stronge & Xu, 2021). The aforementioned definitions narrate competence as functional, task-oriented and industry focused preparation with which employees apply the right skills and knowledge needed for workplace settings (Wongnaa & Boachie, 2018). Competency-based performance (CBP) is an approach that expresses employees plaudit through the demonstration of skills and knowledge required to perform their task (Crawley, 2018), as such, the performance of an employee is measured through appraisal (Ikramullah et al., 2016; A. Sharma & Sharma, 2017).

2.2.2 Overview of Employee Performance

Performance mainly is a function of training and development. The ability to apply new technology, improved performance or being a highly motivated employee demonstrate performance (Aguinis, 2019). However, standards which can be measured must be instituted by managers of organization if they are to achieve higher performance levels (Rodriguez & Walters, 2017). Whereas the result, relevance and success of an individual employee can best describe his performance. Yet, the focus of the performance is centred on the productivity, efficiency effectiveness, quality and punctuality (K. Kim et al., 2018). But, the total success of a particular task measured against pre-selected values of precision, cost and speed as well as the premeditated approach to improving organizational effectiveness by refining the performance of individuals within the organization is crucial (Rodriguez & Walters, 2017)

2.3 Theoretical Underpinnings of The Research

The researcher's proposed thesis would lay its grounds on three amalgamated theories. Particularly, the theory of reinforcement, Maslow's hierarchy needs theory and the theory of social learning.

2.3.1 Theory of Reinforcement of Motivation (ToRM)

An American social philosopher, psychologist and behaviourist; Burrhus Frederic Skinner in 1957 developed this noble theory 'reinforcement Theory'

(Richelle, 2016). The highlights of this theory is the learning behaviour of a person which suggests that the learner will constantly repeat that behaviour attached to a positive occurrences (Schmidt et al., 2018). He further suggested that the objectives of every organization must be the focal point of training & development programs. This scenario of this training & development programs should breed a positive outcome. (Schmidt et al., 2018). Further, in elaborating this concept, Burrhus Frederic Skinner in 1957, suggested that reinforcement theory, is an appendage of myriad of techniques available in human resource observations that links training & development regime and which trigger the required suggestion by this theory (Armstrong & Taylor, 2020).

2.3.2 Theory of Social Learning (TSL)

Theory of Social Learning' showcase a modern perspective of erudition. Albert Bandura (1977), suggests that direct reinforcement is not a panacea for all types of learning. Direct enforcement presupposes that training & development programs does not remedy all sorts of learning because certain communal fundamentals cannot be taught (Benson & Voller, 2014), so the learner picks those fundamentals from his surroundings. These type of learning is associated with the understanding of different behaviours and labelled as observational culture (Han & Ellis, 2022). In an organization, the behaviour of employees influences surrounding and the environment. Again, organizations must create a professional environment which will produce a surrounding which generate a learning activity. (Al-Omari & Okasheh, 2017; Lamsal, 2022).

2.3.3 Maslow's Hierarchy Needs Theory (MHNT)

Abraham Maslow's paper authored in 1943, thus; "A Human Motivation Theory" laid bare Maslow's hierarchy of needs according to Stoyanov, (2017). Maslow used his book "Motivation and Personality" in 1954 to refine this theory, (Sparks & Repede, 2016). This theory remains relevant in the study of in sociology, management training, and psychology classes since then, making it popular (Dalton, 2017; Gill et al., 2017). Maslow's hierarchy of needs theory emphasises on the mindset which explains human drive on the quest of diverse levels of needs (Lussier, 2019). This categorises how humans are inspired to accomplish their desires in a hierarchical demand (Lugones & Spelman, 2018). The most basic needs are considered towards a movement to a more advanced pursuit. According to Mansaray, (2019), the focal point of this theory, is to get to the apex of the hierarchical order thus; self-gratification.

2.4. Hypotheses and Model Development

2.4.1 Competency-Based Performance Appraisal

The term ‘competencies’ in human resource management has been in existence since the early 70s. According to Boyatzis et al., (2009), This term was introduced by David McClelland. However, knowledge, skills and other management qualities are some of the competency representations needed for effective performance in an employment position (Islami et al., 2018; Prifti et al., 2017; Sabir, 2016). Moreover, for organizations to focus on job-related information and personal skills in managing employees, the innovation of ‘competency model’ is crucial (Ali et al., 2020; Bharwani & Talib, 2017; Sengupta et al., 2013). The purpose of this competency model is to differentiate between higher performance and average performance (Porat et al., 2018). Whereas, competency has many sides yet, there is one common factor which is to enhance the performance of an employees at the workplace (N. A. M. Ali et al., 2020; Gilbert, 2013). Nonetheless, competency-based performance appraisal determines the training needs of employee in organizations (Mazhisham et al., 2018).

2.4.2 Training and Development Regime

According to, Jaworski et al., (2018), training and development are important activity in every organization due to the high cost of employee turnover. Training and development in organization come with a lot of benefits some of these benefits are; consistency in job performance, higher organizational satisfaction and cost effectiveness (Bisharat et al., 2017; Dhar, 2015; Egan, 2017; Hosain, 2016; Mishra, 2018). Unfortunately, organizations refuse to invest heavily in training and development with the view that investments in training & development is a waste of resources (Akpaniteaku, 2019; Phillips & Phillips, 2016). Instead some managers argue that, it is better to invest in other sectors within the organization (Arjaliès & Bansal, 2018; Spring et al., 2017). Nonetheless, this mindset hinders on the output of the individual employees and the organization in general (Perlow, 2019). Besides, this attitude can lead to turnover intentions. It must be emphasised that turnover of employees will lead to frequent recruitment which is expensive, time consuming and daunting (Dennis, 2020). Organizations must therefore be willing to as a matter of policy invest in the training & development activities of their employees to reap the benefits that come with it (Angst et al., 2017).

2.4.3 Employee Commitment

According to P. Sharma et al., (2016), a committed employee is a satisfied employee. Moreover, there are many factors that contribute to employee's commitment (A. Cohen, 2017; Y. Wang, 2020). One of such factors is the willingness of organizations to invest in the training & development of their workforce (Al Karim, 2019). Employees are generally ambitious, and will want to get to the pinnacle of their chosen profession (Strauss, 2017). Implicitly, they need to development their skills, knowledge, capabilities and broaden their horizon through training and development to be able to achieve their ultimate goal (Barrett, 2017; Ocen et al., 2017). There are three component model of commitment that hinges on the psychology of individual employee as conceptualised by Meyer & Allen, (1991), which borders the exhibits of the policies of their organizations (Sohn et al., 2020). These components are affective commitment; which is the emotional attachment, identification and involvement of an individual to an organization (Ahmad et al., 2019; Allen, 2017). Identification occurs when the employee's values is in tandem with that of the values and objectives of his organization (Price & Whiteley, 2014). The continuance commitment relies on the cost associated with the employee quitting his job (Jaros et al., 2017). With this level of commitment, the employee considers their investment in the organization, and the lost or gain if they are to leave the organization (Yahaya & Ebrahim, 2016). Moreover, this kind of commitment can be due to lack of alternative employment (Keskes et al., 2018). Finally, the employee's sense of obligations for belonging to an institution can be described as normative commitment (Karmakar, 2020).

2.4.4 Investment in Training

Globalization and technical variations are rapidly converting the workplace, thereby generating mandate for emerging skills and rendering other prevailing skills archaic (J. Kim & Park, 2020; Sung & Choi, 2014). Therefore, it is strategically imperative to equip employees with the skills to thrive in this everchanging environment. For employees to be up-to-date in their skill set, various agencies and organizations prioritise the facilitation of continuous life elongated investments in training of their employees to maintain their competitiveness and living standards (Burns, 2020; Jaworski et al., 2018). Academic institutions in Ghana are of no different. Suffice to say that, training schemes are being touted as mechanism for achieving organizational goals including reduced employee turnover, employee commitment, satisfaction and employee consistency (Nejati et al., 2020). In addition, job-related training usually integrates existing skills variances instead of modifying it thereby broadening the discrepancies within the workplace (Federici et al., 2021). For instance, employees with higher potentials with respect to attitude scores, more

formal education and those with higher occupational status rather than less-skilled colleagues receive more work-related training (Caliendo et al., 2020). In contrast, less educated employees receive relatively high returns from training which makes this disparity even more puzzling, nonetheless, organizations are equally and willing to invest in them (Caliendo et al., 2020; Eagly & Carli, 2018). Lack or minimal investment in training may be due to myriad of reasons, one reason may be due to the fact that individuals underestimate the gains of formal education, therefore, information on those gains can results in increased investment (Fischer et al., 2020).

2.4.5 Employee Intention to Stay

Employee turnover in academic institutions is a global phenomenon, thus, affecting both developing and industrialised countries, which has been studied many times (Ankrah & Omar, 2015; R. K. Sharma & Chaturvedi, 2017). According to Saraih et al., (2016), turnover, is defined as the ratio of employees who leave an organization relative to the total number of all the employees within the organization for a particular period. As a result, new employees are hired to fill existing vacancies which are created by voluntary or involuntary turnover (Becton et al., 2017). Ekhsan, (2019), believes that labour turnover is the overall movement of employees in and out of organization. Nonetheless, turnover has many negative connotations such as the distortion of wages and salary system put up by management (Lazear, 2018). Besides, from organizational point of view turnover is expensive due to the fact that replacements are highly costly and can throw off the balance sheet of organization (Greer, 2021). However, labour turnover has proven to impact significantly on organizations (Ekhsan, 2019). High turnover can have dire consequences on the profitability of organizations if not managed correctly (Albrecht & Marty, 2020). Again, as suggested by Austin et al., (2018), replacing an employing cost approximately 50% of the workers annual earnings, these costs are attributed to training and other capacity building methods. Productivity presumably drops when an employee quits his job because of the learning curve that ensue, amidst the hiring of a new employee, the understanding of job description and rules, culture and regulations guiding the operations of the organization (Bratton et al., 2021; Saraih et al., 2016). Furthermore, turnover drains intellectual capabilities from organizations and replenish their competitor organizations which makes costly to the departed organization (Wilensky, 2015).

2.5 Conceptual Framework of Variables Deduced from Literature

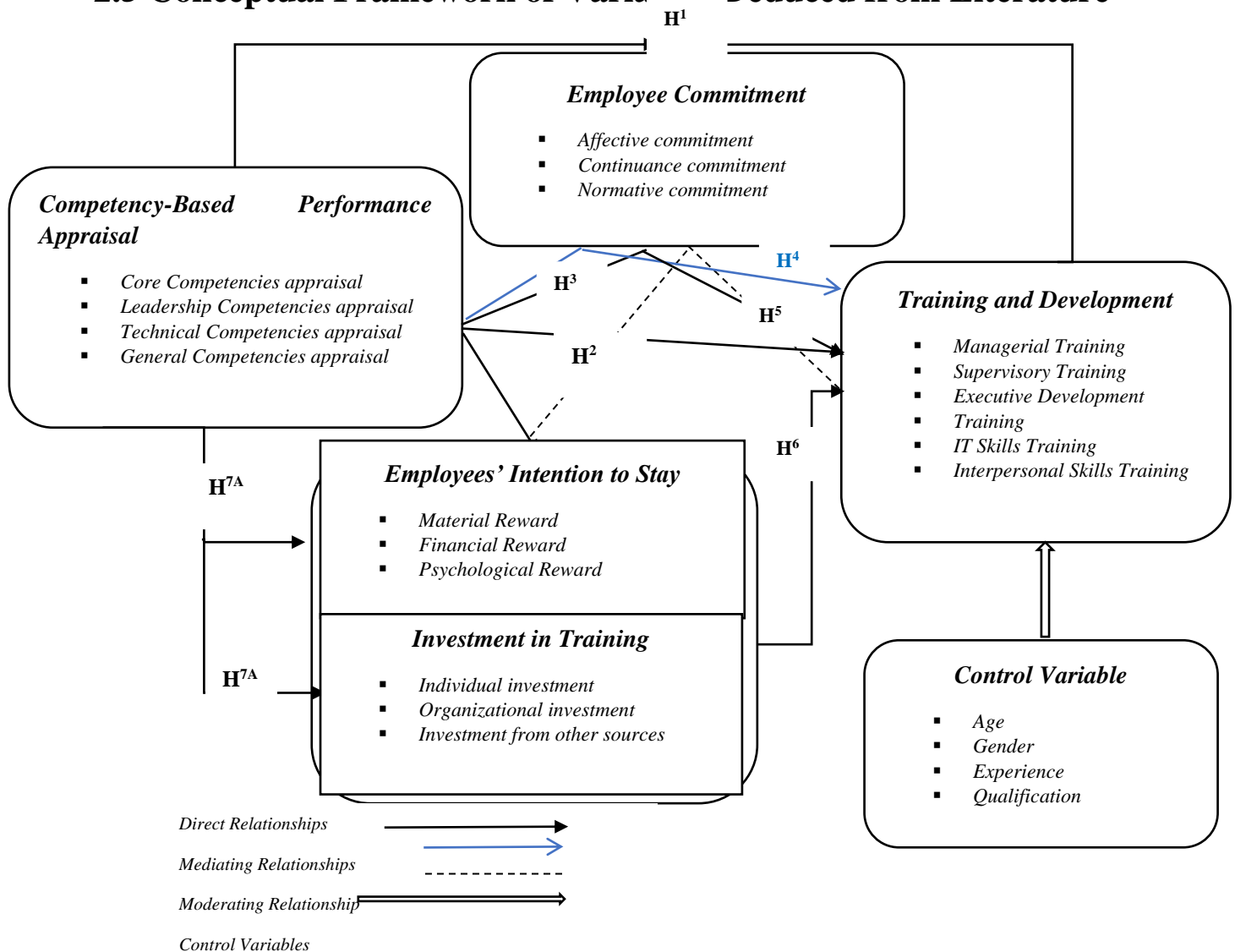


Figure 1: Conceptual Framework

Source: Authors own construct, Owusu (2022) based on reviewed literature

2.6 Stated Hypothesis

H¹: A positive relationship exists between competency-base performance appraisal and training & development activities.

H²: Employees intention to stay and investment in training positively moderate employee commitment and training & development.

H³: Competency-based performance appraisal and employee commitment displays a positive relationship.

H⁴: Competency-based performance appraisal and employee commitment displays a positive relationship.

H⁵: Training & development and employee commitment exudes a positive relationship.

H⁶: Investment in training, intention to stay and training & development projects a positive relationship.

H^{7a}: Competency-based performance appraisal and investment in training displays a positive relationship.

H^{7b}: Competency-based performance appraisal and employee's intention to stay displays a positive relationship.

2.7 The Summary and Definitions of The Various Constructs

Table 1: Summary of the definitions of constructs and literature sourced

Concepts	Description	Theoretical source
Competency-Based Performance	'The identification, measurement, evaluation, improvement, encouragement and the reward for performance can be described as Performance Appraisal process'. 'The periodic review and evaluation of employees by their employers via a formal classification can be performance appraisal'	(Islami, Mulolli, & Mustafa, 2018) (Sabir, 2016). (Hamidizadeh & Mohammadnezhad Fadardi, 2019)
Training and Development	'A subsystem within organizations which emphasizes on the improvement of performance of individuals and groups is described as Training & development.' 'Training is an educational process that involves polishing of skills, concepts, changing of attitude and gaining more information to enhance performance'.	Egan, 2017). (Mishra, 2018)
Employee Commitment	'Employee commitment is an individual's attachment, involvement or identification to an organization.'	(A. Cohen, 2017; Y. Wang, 2020)
Investment in Training	'Employee training is worth the investment'. 'Staff training is essential for specific purposes related to any business success.' 'Putting resources into training that develops employees	(Jaworski, Ravichandran, Karpinski, & Singh, 2018; Federici et al., 2021)

	<i>toward long-term career goals can also promote greater job satisfaction.'</i>	
<i>Employees' intention to stay</i>	<i>'Intention to stay is defined as employees' intention to stay in their present employment to build relationship with their current employer on a long-term basis'</i>	<i>(Wynen et al., 2022)(Johari et al., 2012)</i>

Source: authors own table

3. STUDY OBJECTIVES AND PROBLEM STATEMENT

3.1 Research Gap

Eventhough, sections of the employees within the various university communities have access to resources to upgrade their capacities. Nonetheless, the administrative employees are more or less short-changed. As a result, the researcher seeks to investigate how competency-based performance appraisal determines the training & development, requirements of the administrative employees at the various tertiary institutions in Ghana

3.2 Key Research Questions

The main research query for this study is 'how does competency-based performance appraisal determines training & development needs in public tertiary institutions within Ghana? Consequently, the researcher questions as follows as a guide for the current study:

RQ1: Is there any significant relationship between competency-based performance appraisal and training & development?

RQ2: what are the established training and development regimes available at the various tertiary institutions?

RQ3: What are the various training & development regimes available at the various public Universities in Ghana?

RQ4: Does investment in training and employee's intention to stay significantly moderate competency-based performance appraisal and training & development activities in public universities in Ghana?

RQ5: Does commitment have a significant effect on training & development of employee's at public Universities in Ghana?

RQ6: Does commitment significantly mediate competency-based performance appraisal and training & development activities in public universities in Ghana?

RQ7: How regular is competency-based performance appraisal conducted in public universities in Ghana

3.3 Study Aims

The primary purpose underpinning this research is to advance an all-encompassing framework to serve as a benchmark for ‘training & development activities of administrative staff of tertiary institutions in Ghana.’

The precise aims (fractional aims) of this study are reckoned subsequently;

RO1: To determine the effect of competency-based performance appraisal on training & development of employees at tertiary institutions in Ghana.

RO2: To establish the availability of training and development regimes at tertiary institutions in Ghana

RO3: To identify the various training and development programs tertiary institutions in Ghana.

RO4: To establish the significance of investment in training and employee’s intention to stay on training & development at tertiary institutions in Ghana.

RO5: To establish the significance effect of commitment on training & development at public universities in Ghana.

RO6: To ascertain the mediating role of employee commitment to competency-based performance appraisal and training & development in at tertiary institutions in Ghana.

RO7: To assess the consistency of competency-based performance appraisal in public tertiary institutions in Ghana.

4. METHODOLOGY

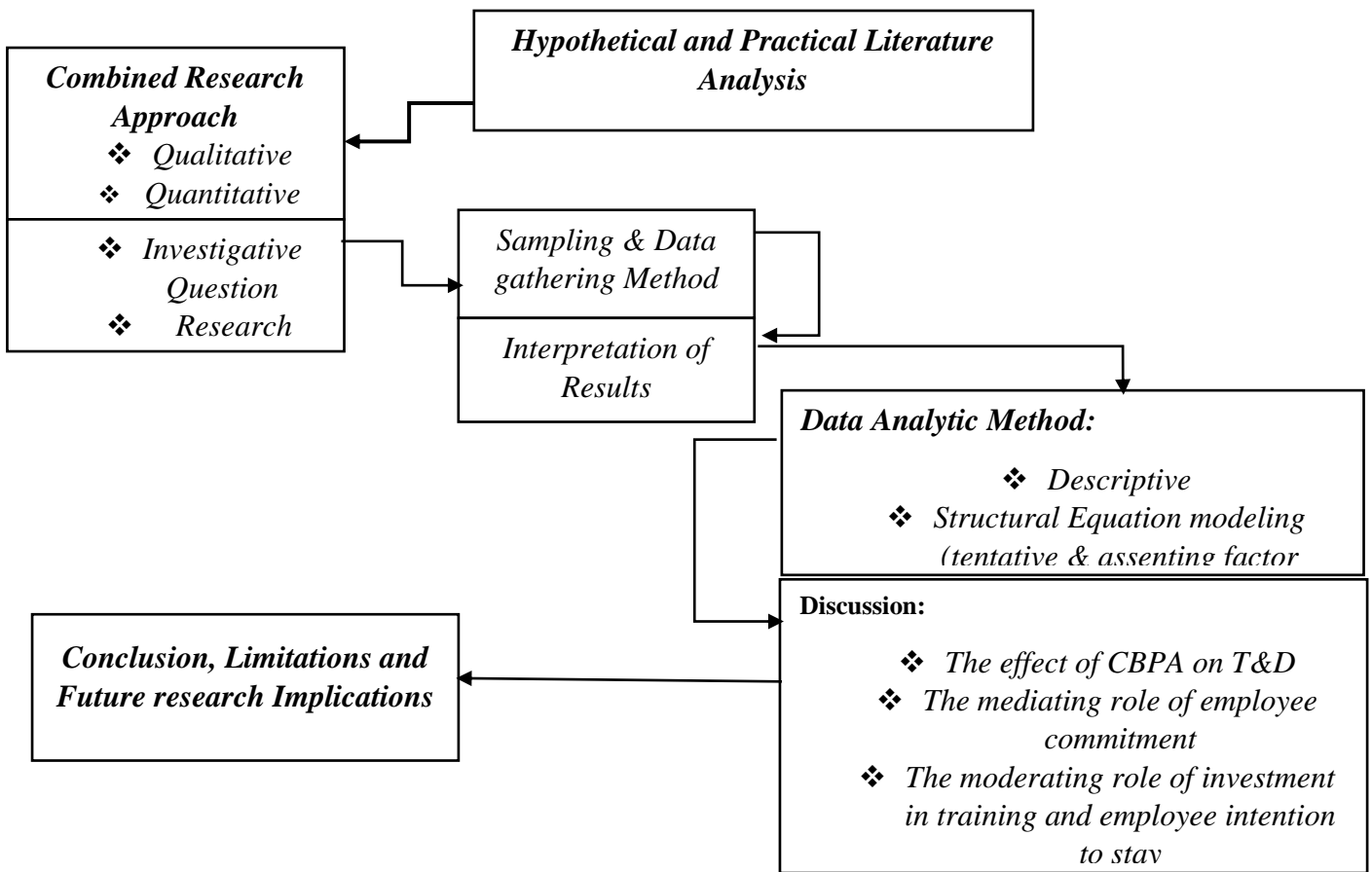


Figure 2: Research design, (Source: author's own concept OWUSU, 2022)

4.1 Demographics and Data Collection Technique

The developed questionnaire was completed in English and distributed only to the target respondents through a multifaceted approach. Thus; the administrative staff of the various tertiary institutions. The questionnaire (both hard copy and online survey and other social media networks), were administered amongst employees of the selected public tertiary institutions in Ghana based on a selection criterion. Although, limited access to the internet and internet literacy is a challenge in the gathering of data through online surveys from various respondents. However, most employees in the tertiary academic institutions have access to the internet which sped up the data collection and broaden the data collection which ultimately helped in getting maximum portion of the response of the target population for the quantitative investigation the population was classified into five strata. Stratified random sampling was deployed to solicit for response from each of the stratum. Equal opportunity and subjective sampling procedures were employed for the study. Convenience sampling and cluster sampling were employed at various stages to obtain data of documents and

records from the training and development unit of the various universities while simple random sampling was employed to solicit responses from the administrative employees of the various universities.

This is within the ambit of the researchers targeted respondents, as 365 valid questionnaires representing 86.9% of the total 420 questionnaires distributed were used for the analysis.

4.2 Software and Data Analytical Tool

With respect to technique for the data analysis, the researcher employed Partial least square and structural equation modelling (PLS-SEM) developed by Sarstedt et al., (2014). The SEM is embedded in with a number of sub-techniques including Confirmatory Factor Analysis (CFA), Exploratory Factor Analysis (EFA), Confirmatory Composite Analysis (CCA), Path Analysis (PA), Partial Least Squares (PLS), Path modelling, and Latent Growth Modelling (LGM) and these techniques has been echoed extensively by (Agrawal & Singh, 2019; Anderson & Gerbing, 1988; Joe F Hair Jr et al., 2020).

Table 3: demographics of the respondents

DETAILS OF RESPONDENTS		FREQUENCY	PERCENT (%)
GENDER	Male	170	46.6
	Female	192	52.6
	Prefer not to say	3	0.8
AGE	18-25	45	12.3
	26-35	141	38.6
	36-45	107	29.3
	46-55	63	17.3
	56-65	9	2.5
EDUCATIONAL LEVEL	B.E.C. E	1	0.3
	S.S.C. E	20	5.5
	CERTIFICATE	19	5.2
	DILPOMA	48	13.2
	BACHELORS	186	50.9
	MSc/M.Ed./M.Phil.	85	23.3
	PhD	6	1.6
JOB EXPERIENCE	Under 1year	12	3.3
	1-2years	45	12.3
	3-5years	108	29.6
	6-10years	86	23.6
	11-15years	51	14.0
	16-20years	37	10.1
	Over 20years	26	7.1

JOB POSITIONS	Chief administrative assistant	29	7.9
	Principal administrative assistant	49	13.5
	Senior Administrative Assistant	80	21.9
	Administrative Assistant	148	40.5
	Clerk Grade 1	40	11.0
	Clerk Grade 2	19	5.2

Sources: Author's field data September 2021 to April 2022

5. DISCOVERIES AND OUTCOMES

5.1 Measurement Model Confirmation

This piece was fully abetted by SmartPLS version 3.3.9 software (Joseph F Hair Jr et al., 2017; G. F. Khan et al., 2019; Shiau et al., 2019), in compliment with Microsoft Excel, IBM SPSS software and WarpPLS. Various research experts in literature of the field of research particularly those inclined to quantitative methodology recommend the adoption of PLS-SEM, with utmost emphasis on the quality principles for the measurement (outer) model assessment. Therefore, the investigation relies on recommendations in literature (Creswell, 2014; Joe F Hair et al., 2019; Joseph F Hair Jr et al., 2017; Mackenzie & Podsakoff, 2012; Podsakoff et al., 2012; Sarstedt et al., 2014; Shmueli et al., 2019). The net effect is that all the suggested statistical thresholds in PLS-SEM literature has been satisfied in the thesis. Nonetheless, questionnaire items that were not meeting measurement criteria during the data processing were eliminated, eventhough, this rarely happened.

A summary of the construct reliability and validity, a tabular form depicting tables 6, 9 and 10.

Table 4 Concept Dependability and cogency

Source: Author's data processing; SmartPLSv.3.3.9

	<i>Cronbach's Alpha</i>	<i>rho_A</i>	<i>Composite Reliability</i>	<i>Average Variance Extracted (AVE)</i>
<i>CBPA</i>	0.847	0.853	0.886	0.567
<i>EC_</i>	0.719	0.730	0.824	0.541
<i>EIS</i>	0.772	0.817	0.866	0.684
<i>IT</i>	0.766	0.777	0.865	0.682
<i>TD</i>	0.847	0.852	0.885	0.524
<i>Moderating Effect 1</i>	1.000	1.000	1.000	1.000
<i>Moderating Effect 2</i>	1.000	1.000	1.000	1.000

Notwithstanding, Fornell-Lacker criterion and cross loadings have proven to be sub-standard to Heterotrait-Monotrait correlation ratio (HTMT) since it is unable to detect a deficiency of discriminant validity (Bittencourt et al., 2021; Duarte & Amaro, 2018; Joseph F Hair et al., 2019; E. Kim & Tang, 2020; Kriel, 2021). 0.85 is the most conventional criterion as it attains the lowest specificity rates of all the replication circumstances at a maximum value of Heterotrait-Monotrait (HTMT) criteria (S. Ali et al., 2019; Franke & Sarstedt, 2019; Usakli & Kucukergin, 2018; Zortea et al., 2019). Consequently, any value less than 0.85 is engrossed with discriminant validity therefore as showcased in table 5 below there is an issue with discriminant validity. Even though, there is no existing threshold for discriminant validity, yet according to Henseler et al., (2015), any value less than 0.85 is an indication of a likely existence of discriminant validity between the two scales.

Table 5: Correlation Matrix-Test of discriminant Validity (Fornell-Lacker Criteria)

<i>Constructs</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
<i>CBPA</i>	0.753						
<i>EC</i>	0.292	0.735					
<i>EIS</i>	0.414	0.350	0.827				
<i>IT</i>	0.261	0.135	0.188	0.826			
<i>TD</i>	0.344	0.189	0.333	0.671	0.724		
<i>Moderating Effect 1</i>	0.127	0.044	0.095	0.040	0.009	1.000	
<i>Moderating Effect 2</i>	0.005	0.102	0.041	0.056	0.171	0.214	1.000

Source: author's own smart PLS output.

Table 6: Test of discriminant validity Heterotrait-Monotrait Ratio (HTMT)

<i>Constructs</i>	<i>CBPA</i>	<i>EC</i>	<i>EIS</i>	<i>IT</i>	<i>TD</i>	<i>Moderating Effect 2</i>	<i>Moderating Effect 1</i>
<i>CBPA</i>							
<i>EC</i>	0.359						
<i>EIS</i>	0.507	0.430					
<i>IT</i>	0.309	0.198	0.239				
<i>TD</i>	0.389	0.237	0.384	0.824			
<i>Moderating Effect 2</i>	0.128	0.085	0.102	0.100	0.140		
<i>Moderating Effect 1</i>	0.064	0.129	0.056	0.091	0.214	0.214	0.187

Source: authors own smart PLS output

5.2 Hypothesis Testing with Partial Least Squares Structural Equation Modelling (Pls-Sem).

To validate the internal consistency, reliability, and convergent validity, PLS-SEM was adopted once again to perform the outer reflective model espousing Fornell-Lacker criterion and Heterotrait-Monotrait ratio (HTMT) as indicated in both table 7 & 8 correspondingly. This process was carried out in the immediate moment of the model fit assessment. Moreover, the traditional Cronbach alpha output in PLS-SEM as depicted in table 6, is quite dynamic when paralleled with the composite reliability (Aggarwal & Kapoor, 2020; Elyousfi et al., 2021; O. Khan et al., 2020; Zhu et al., 2019). On the other hand, as indicated in (table 8), all the outer loading has value higher than the reference point of 0.6 (Bagozzi & Yi, 1988). Further, as explained by Evren et al., (2022), for the internal consistency of the research construct to be considered valid the composite reliability must have a reference point value beyond 0.8. and as showcased in table 6, all the composite reliability values have a baseline value greater than or equal to 0.8, a clear manifestation that all the five research constructs have acceptable internal consistency (Afroz et al., 2015; Bedford & Speklé, 2018; Evren et al., 2022; Ibrahim et al., 2021).

5.3 Direct, Indirect Effect and Moderating Variables

While the ancillary variables lay bare the function of the intermediary variable (employee commitment-EC) with respect to the independent (determinant), thus, (competency-based performance appraisal-CBPA) and the dependent (effect) variable (Training and Development activities-T&D), yet, the direct effect defines the straight paths between the determinant variable and the effect variable. A direct path coefficient as indicated by table 11 with details of hypothetical coefficients depicts the direct hypothesis or coefficient as concisely elaborated in the table 11 below and indicates that CBPA to EC; CBPA to EIS; CBPA to IT; CBPA to TD; EIS to EC; EIS to TD; IT to TD; as well as, ME- 1 to TD, are statistically significant at statistical level greater than 1.96 and or p-value less than 0.05. Nonetheless, EC to IT; EC to TD and ME-2 to TD are not statically significant, eventhough, ME-2 to TD bares a higher significance of 1.172. The mediation as formed by the research model with the adopted software (SmartPLS) for the indirect hypotheses shows that; while CBPA to IT to TD; and CBPA to EIS to TD are statistically significant with p-value less than 0.05,(p-value<0.05) and or t-value greater than 1.96 (t-value>1.96), CBPA to EC to TD and CBPA to EC to IT are statistically insignificant at p-value greater than 0.05 (p-value >0.05) and or t-value less than 1.96 (t-value < 1.96). Most importantly, the two moderating variables had one being statistically significant while the other was statistically insignificant. Thus, employee intention to stay (EIS) significantly

moderate employee commitment and training and development at statistic level of p-value lower than 0.05 and or t-value greater than 1.96. while investment in training (IT) has no moderating effect.

5.4 Determination Coefficient

According to J. Cohen, (2013), ‘ Amongst the most practical techniques for calculating the effect size of individual variables or constructs in a multiple regression model with continuous independent and dependent variables is Cohen’s f-square’. Cohen branded effect size as slight, average or huge. Cohen reiterated that, the analytical power of research constructs is determined by coefficient of determination (R^2) simply put, the percentage of variation the dependent variable described by the independent variable. However, to consolidate for the added independent variables in a research model, the sample size is moderated with an adjusted R^2 . As indicated in table 12 the estimated determination coefficient (R^2) for the construct training and development (TD) as dependent variable describe 52% variation vis-à-vis the independent variable (determinant variable), thus competency-based performance appraisal (CBPA). While the adjusted (R^2) of the construct ‘employee commitment’ as dependent variable indicated by 15% of described variation training and development as independent variable. In measuring the magnitude of the relationship amongst the variables, an index of the effect size represented by Cohen’s f-square (Cohen’s f^2) was deployed as depicted in table 12. As stipulated by J. Cohen, (2013), the values or metrics are in three categories; small effect $0.02 \leq f^2 \leq 0.15$; median effect $0.15 \leq f^2 \leq 0.35$ strong effect $f^2 \geq 0.35$. The strength of the most of the significant relationship are in the median strength category as evidenced in the estimated research model extracted from the SmartPLS in figure 4.

Table 7: A path analysis of the structural model (direct and indirect)

Relationships	Original Sample (β)	Sample Mean (SM)	Standard Deviation (SD)	T Statistics	P-Values (2-sided)	P-value (1-sided)	2.5%	97.5%
CBPA -> EC	0.177	0.184	0.066	2.704	0.007	0.004	0.313	0.057
CBPA -> EIS	0.414	0.419	0.051	8.101	0.000	0.000	0.517	0.317
CBPA -> IT	0.242	0.243	0.063	3.840	0.000	0.000	0.119	0.367
CBPA -> TD	0.100	0.101	0.049	2.047	0.041	0.021	0.005	0.200
EC_ -> IT	0.065	0.067	0.055	1.172	0.241	0.121	0.173	0.042
EC_ -> TD	0.022	0.022	0.044	0.485	0.627	0.314	0.110	0.065
EIS -> EC_	0.277	0.281	0.056	4.928	0.000	0.000	0.167	0.391
EIS -> TD	0.158	0.157	0.048	3.317	0.001	0.001	-0.250	-0.064
IT -> TD	0.606	0.606	0.046	13.15	0.000	0.000	0.509	0.691
ME(EIS)-1 -> TD	0.113	0.113	0.051	2.238	0.025	0.013	0.019	0.216
ME-2(IT) -> TD	0.039	0.037	0.058	0.667	0.505	0.253	0.147	0.079
CBPA -> EC -> TD	0.004	0.005	0.009	2.330	0.017	0.014	0.011	0.024
CBPA -> IT -> TD	0.147	0.147	0.039	3.790	0.000	0.000	0.072	0.223
CBPA -> EIS -> TD	0.065	0.066	0.022	2.983	0.003	0.002	0.025	0.111
CBPA -> EIS -> EC	-0.115	-0.118	0.027	4.237	0.000	0.000	0.007	0.042

Table 8: Overview of the structural model- Cohen's f^2

<i>Effect</i>	<i>Beta</i>	<i>Indirect Effects</i>	<i>Total Effect</i>	<i>Cohen's f^2</i>	<i>Remarks</i>
<i>CBPA -> EC</i>	-0.292		-0.301	0.031	Small effect
<i>CBPA -> EIS</i>	-0.414	0.100	-0.419	0.207	Medium effect
<i>CBPA -> IT</i>	0.261		0.264	0.058	Small effect
<i>CBPA -> TD</i>	0.329	-0.022	0.334	0.016	Small effect
<i>EC -> IT</i>	-0.065		-0.067	0.004	Small effect
<i>EC -> TD</i>	-0.061	-0.158	-0.062	0.543	Strong effect
<i>EIS -> EC_</i>	0.277		0.281	0.075	Small effect
<i>EIS -> IT</i>	-0.018	0.606	-0.019	0.651	Strong effect
<i>EIS -> TD</i>	-0.175		-0.174	0.004	Small effect
<i>IT -> TD</i>	0.606	0.113	0.606	0.706	Strong effect
<i>ME 1 -> TD</i>	0.113		0.113	0.024	Small effect
<i>ME 2 -> TD</i>	-0.039	-0.039	-0.037	0.003	Small effect
<i>Construct</i>	(R^2) Square		(R^2) Square Adjusted		
<i>EC</i>	0.149		0.143		
<i>EIS</i>	0.171		0.169		
<i>IT</i>	0.072		0.066		
<i>TD</i>	0.521		0.511		

Source: Authors data processing from SmartPLS

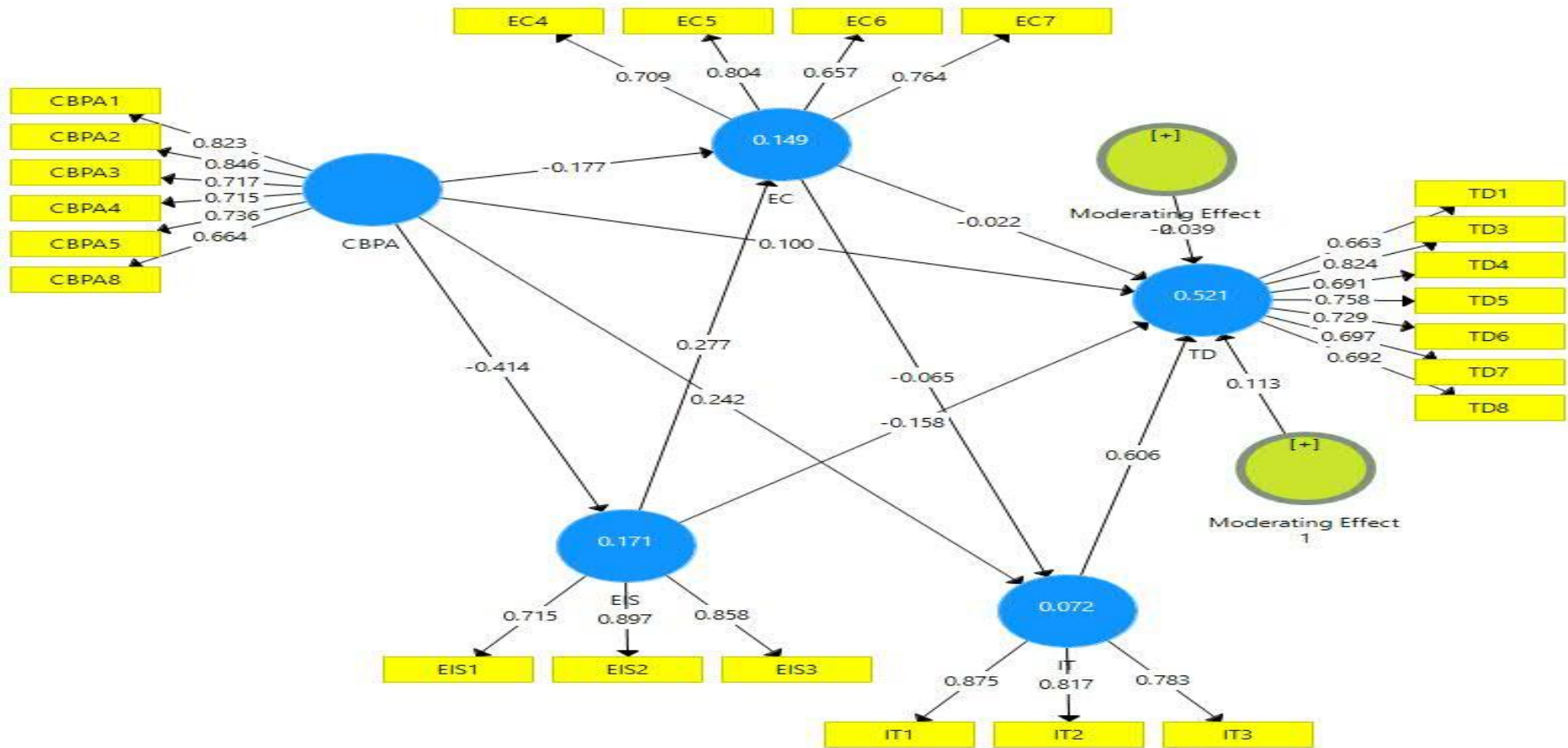


Figure 3: Predicted research model. Source: authors data output from SmartPLS v.3.3.9

6. DISCUSSIONS OF THE RESULTS

6.1 Discussions and Related Outcome of the Results

With respect to these findings the researcher begins the discussions with a firm conviction that, this result provides a strong foundation to contend that training and development is a central tool which serves as a fulcrum for employee commitment, in the education sector. As conceived by Abraham Maslow, in 1943, as subsequently enhanced in 1954, this psychological undertone explaining the human motivation based on pursuit of different levels of needs, depicts that; Human beings are naturally motivated to fulfil their needs in a hierarchical order, with the ultimate goal of fulfilling self-actualization. Like any other profession, and as explained by Maslow, administrators will relish the opportunity to get to the pinnacle of their profession thus; become the registrar as in the case of academia. This can only be actualised when there is a clear visible path through training and development opportunities. Consequently, the researcher sought to measure how the competency-based performance appraisal of these administrative employees will inform the training needs vis-à-vis the training and development requirement of employees of tertiary institutions in a developing economy (Ghana).

To achieve these outcomes, the researcher set out seven objectives as a guiding principle to elucidate information to draw an informed conclusion. These objectives occasioned seven rhetorical questions to further solicit for the exact information and enhance the purpose of this dissertation. In the end, eight hypotheses were formulated to get a response to these pressing questions.

6.2. Thematic Analysis of The Qualitative Report from The Heads of Administration and Heads of Department

The researcher gathered professional response data with qualitative instrument from the heads of administration and heads of department across the various departments and faculties of the various tertiary institutions in view of extracting their opinion on training and development and investment in training regime and its relative effect on employee commitment and employee's intention to stay based on competency-based performance appraisal. A total of five (5) well established public tertiary institutions were selected for the purpose of this qualitative enquiry. Of the five institutions, five faculties were again selected from each tertiary institution, totalling about twenty-five (25) faculties in Ghana again, five senior members of administration were select from each Faculty for this exercise.

Questions & Responses	Which institution do you work for?	Indicate your rank	How long with this institution?	Briefly account for the appraisal system	How frequent is the performance appraisal?	Respond briefly about training & development regime	Source of funding for training & development in your institution	How does T&D influence your subordinates?	How does lack of training influence employee turnover?
1	UG	Chief Administrator	10yrs	Core Competencies & Technical	Annual Appraisal	Available	IGF & Self-funding	Increase Productivity	Diminished productivity
2	AAMUSTED	Assistant Registrar	18yrs	Leadership, & General Competencies.	Annual Appraisal	Available	Self-funding	Boost Commitment	Reduced commitment
3	UCC	Senior Assistant Registrar	20yrs	Core and Technical Competencies	Annually	Available	Interest group	Morale Booster	Decreased morale
4	UCC	Principal Accounts Officer	12yrs	Core, General and Technical Competencies	Annually	Available	Self-funding	Improved Attitude	Fragile attitude
5	AAMUSTED	Principal Administrative Assistant	6yrs	General, Technical & Leadership Competencies	Quarterly	Available	IGF & Self-funding	Improved Focus	Focus defect
6	AAMUSTED	Chief Accounts Officer	13yrs	Technical & leadership appraisal	Quarterly	Available	Self-funding	Improved Productivity	Productivity suffers
7	UG	Principal Administrator	10yrs	General Appraisal	Annually	Available	Interest group	Improved Productivity	Reduced productivity
8	UENR	Principal Accounts Officer	9yrs	Technical Appraisal	Twice a year	Available	Self-funding	Increased Commitment	Reduced commitment
9	KNUST	Assistant Registrar	21yrs	Core & Technical Appraisal	Every half year	Available	Self-funding	Improved Performance	Reduced performance
10	UENR	Chief Accounts Officer	6yrs	General Appraisal	Twice a year	Available	Self-funding	Improved Competitiveness	Competitive disadvantaged

source: Qualitative Data Gathering guided by interview scripted by the Author

**Readers must take note that; this table representing the qualitative data does not illustrate the exact quotes from the respondents. On the contrary, it is a summary of the import of their response. So as to streamline the table and make it simpler and readable.*

***AAMUSTED-AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND ENTREPRENEURAL DEVELOPMENT**

***KNUST-KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

***U.C.C- UNIVERSITY OF CAPE COAST**

***UENR- UNIVERSITY OF ENERGY and NATURAL RESOURCES**

***U G-UNIVERSITY OF GHANA**

***IGF-INTERNALLY GENERATED FUND**

Table 10: A summary of research findings

<i>HYPOTHESES</i>	<i>RELATIONSHIPS</i>	<i>P-VALUE</i>	<i>COHEN'S F</i>	<i>EFFECT SIZE</i>	<i>REMARKS</i>
<i>H¹</i>	<i>CBPA->TD</i>	<i>0.041</i>	<i>0.016</i>	<i>Small Effect</i>	<i>Accepted</i>
<i>H^{2A}</i>	<i>ME-1->TD</i>	<i>0.025</i>	<i>0.024</i>	<i>Small Effect</i>	<i>Accepted</i>
<i>H^{2B}</i>	<i>ME-2->TD</i>	<i>0.505</i>	<i>0.003</i>	<i>Small Effect</i>	<i>Rejected</i>
<i>H³</i>	<i>CBPA->EC</i>	<i>0.007</i>	<i>0.031</i>	<i>Small Effect</i>	<i>Accepted</i>
<i>H⁴</i>	<i>CBPA->EC->TD</i>	<i>0.000</i>	<i>0.085</i>	<i>Small Effect</i>	<i>Accepted</i>
<i>H⁵</i>	<i>EC->TD</i>	<i>0.627</i>	<i>0.627</i>	<i>Strong Effect</i>	<i>Rejected</i>
<i>H⁶</i>	<i>IT->TD</i>	<i>0.000</i>	<i>0.706</i>	<i>Strong Effect</i>	<i>Accepted</i>
<i>H^{7A}</i>	<i>CBPA->IT</i>	<i>0.000</i>	<i>0.038</i>	<i>Small Effect</i>	<i>Accepted</i>
<i>H^{7B}</i>	<i>CBPA->EIS</i>	<i>0.000</i>	<i>0.207</i>	<i>Medium Effect</i>	<i>accepted</i>

Author's own from SmartPLS V3.3.9

7. CONCLUSIONS

The main objective of every training & development activity is to improve on the competencies of the employee and by extension the competitiveness of organization. Therefore, to achieve these competencies and to build on the competitiveness. It is incumbent on every organization or institution alike to design a proper training and development regime for their employees. The purpose of these training and development regimes is to build a competitive advantage of an organization over their competitors.

8. CONTRIBUTIONS TO THEORY

8.1 Academic and Theoretical Importance

The study debatably is a broadminded study into training and development activities at the various public tertiary in Ghana. This research intends to provide a model for theory, practical, academic and managerial benchmark to human resource managers and practitioners. The proposed study contributes to developing a theoretically validated training and development regime which eventually could be adopted as a benchmark by human resource lecturers for the development of their human resources students in academia. Again, the proposed thesis will serve as a notice to academicians and scholars to continue in the exploration of the link and the effect of competency-based performance appraisal on employee training and development activities in an academic institution.

8.2 Practical and Managerial Importance

Concerning practical importance to this study, development of scientifically corroborated context that would be useful for human resource practitioners at various organizations. one of the prime objectives of this study is to give impetus to captains of industry, HR practitioners and heads of institution to constantly appraise their employees to determine their training needs and consequently provide the requisite training regime for them.

8.3 Study Limitations

The first is the study is within some academic institutions in Ghana which may not reflect what happens in the general academic institutions in Ghana. second, other research method like diagnostic, predictive and prescriptive other than the adopted techniques like the inductive-deductive approach could equally have been used. Third, time constraint is one of the limitations since the data was gathered from Ghana it took a bit of time thus from (September 2021-April 2022), amidst covid19 pandemic.

8.4 Suggestions for Future Research.

First, the study was conducted purely with data from public tertiary institutions, therefore, a counter research in the private tertiary institutions will give a broader view and reaffirm the links amongst the variables at play. Second, the data for the study is cross-sectional in nature which suggest that there is no guarantee that administrative employees in the academia will be committed to their institution with a positive turnover intention. Therefore, the researcher recommends periodic investigation in the academia to the cross-validate employees' commitment and effect of training and development activities by longitudinal design other than cross-sectional.

REFERENCES

- Afroz, R., Masud, M. M., Akhtar, R., Islam, M., & Duasa, J. B. (2015). Consumer purchase intention towards environmentally friendly vehicles: an empirical investigation in Kuala Lumpur, Malaysia. *Environmental Science and Pollution Research*, 22(20), 16153–16163.
- Aggarwal, V. S., & Kapoor, M. (2020). Multigroup analysis of higher-order model of knowledge variables in the context of global ventures through PLS-SEM. *South Asian Journal of Business Studies*.
- Agrawal, S., & Singh, R. K. (2019). Analyzing disposition decisions for sustainable reverse logistics: Triple Bottom Line approach. *Resources, Conservation and Recycling*, 150, 104448.
- Aguinis, H. (2019). *Performance Management For Dummies*. John Wiley & Sons.
- Ahmad, A., Kura, K. M., Bibi, P., Khalid, N., & rahman Jaaffar, A. (2019). Effect of compensation, training and development and manager support on employee commitment: the moderating effect of co-worker support. *Journal on Innovation and Sustainability RISUS*, 10(2), 39–55.
- Akpaniteaku, N. R. (2019). *Impact of training and development on remedying recruitment failures*. Dublin Business School.
- Al-Omari, K., & Okasheh, H. (2017). The influence of work environment on job performance: A case study of engineering company in Jordan. *International Journal of Applied Engineering Research*, 12(24), 15544–15550.
- Al Karim, R. (2019). Impact of different training and development programs on employee performance in Bangladesh perspective. *International Journal of Entrepreneurial Research*, 2(1), 8–14.
- Albrecht, S. L., & Marty, A. (2020). Personality, self-efficacy and job resources and their associations with employee engagement, affective commitment and turnover intentions. *The International Journal of Human Resource Management*, 31(5), 657–681.

- Ali, N. A. M., Shafii, Z., & Shahimi, S. (2020). Competency model for Shari'ah auditors in Islamic banks. *Journal of Islamic Accounting and Business Research*.
- Ali, S., Ullah, H., Akbar, M., Akhtar, W., & Zahid, H. (2019). Determinants of consumer intentions to purchase energy-saving household products in Pakistan. *Sustainability*, *11*(5), 1462.
- Allen, M. W. (2017). Commitment. *The International Encyclopedia of Organizational Communication*, 1–10.
- Alnawafleh, E. A. T., Abd Halim, M. S. B., & Tambi, A. M. B. A. A. (2018). The Impact of Human Resource Management Practices, Organizational Culture, Motivation and Knowledge Management on Job Performance with Leadership Style as Moderating Variable in the Jordanian Commercial Banks Sector. *Journal of Reviews on Global Economics*, *6*, 477–488.
- Amberg, J. J., & McGaughey, S. L. (2019). Strategic human resource management and inertia in the corporate entrepreneurship of a multinational enterprise. *The International Journal of Human Resource Management*, *30*(5), 759–793.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411.
- Angst, C. M., Block, E. S., D'arcy, J., & Kelley, K. (2017). When do IT security investments matter? Accounting for the influence of institutional factors in the context of healthcare data breaches. *Accounting for the Influence of Institutional Factors in the Context of Healthcare Data Breaches (January 24, 2016)*. Angst, CM, Block, ES, D'Arcy, J., and Kelley, K, 893–916.
- Ankrah, S., & Omar, A.-T. (2015). Universities–industry collaboration: A systematic review. *Scandinavian Journal of Management*, *31*(3), 387–408.
- Arjaliès, D.-L., & Bansal, P. (2018). Beyond numbers: How investment managers accommodate societal issues in financial decisions. *Organization Studies*, *39*(5–6), 691–719.
- Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.
- Austin, B. A., Glaeser, E. L., & Summers, L. H. (2018). *Jobs for the Heartland: Place-based policies in 21st century America*. National Bureau of Economic Research.
- Bag, S., Wood, L. C., Xu, L., Dhamija, P., & Kayikci, Y. (2020). Big data analytics as an operational excellence approach to enhance sustainable supply chain performance. *Resources, Conservation and Recycling*, *153*, 104559.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94.
- Barrett, F. J. (2017). Creativity and improvisation in jazz and organizations: Implications for organizational learning. In *The aesthetic turn in management* (pp. 407–424). Routledge.

- Becton, J. B., Carr, J. C., Mossholder, K. W., & Walker, H. J. (2017). Differential effects of task performance, organizational citizenship behavior, and job complexity on voluntary turnover. *Journal of Business and Psychology*, 32(4), 495–508.
- Bedford, D. S., & Speklé, R. F. (2018). Construct validity in survey-based management accounting and control research. *Journal of Management Accounting Research*, 30(2), 23–58.
- Benson, P., & Voller, P. (2014). *Autonomy and independence in language learning*. Routledge.
- Bharwani, S., & Talib, P. (2017). Competencies of hotel general managers: a conceptual framework. *International Journal of Contemporary Hospitality Management*.
- Bisharat, H., Obeidat, B. Y., Alrowwad, A., Tarhini, A., & Mukattash, I. (2017). The effect of human resource management practices on organizational commitment in chain pharmacies in Jordan. *International Journal of Business and Management*, 12(1), 50–67.
- Bittencourt, I. I., Freires, L., Lu, Y., Challco, G. C., Fernandes, S., Coelho, J., Costa, J., Pian, Y., Marinho, A., & Isotani, S. (2021). Validation and psychometric properties of the Brazilian-Portuguese dispositional flow scale 2 (DFS-BR). *PloS One*, 16(7), e0253044.
- Boyatzis, R., Boyatzis, R. E., & Ratti, F. (2009). Emotional, social and cognitive intelligence competencies distinguishing effective Italian managers and leaders in a private company and cooperatives. *Journal of Management Development*.
- Boyd, V. A., Whitehead, C. R., Thille, P., Ginsburg, S., Brydges, R., & Kuper, A. (2018). Competency-based medical education: the discourse of infallibility. *Medical Education*, 52(1), 45–57.
- Bratton, J., & Gold, J. (2017). *Human resource management: theory and practice*. Palgrave.
- Bratton, J., Gold, J., Bratton, A., & Steele, L. (2021). *Human resource management*. Bloomsbury Publishing.
- Burns, R. (2020). *Adult Learner at Work: The challenges of lifelong education in the new millenium*. Routledge.
- Caliendo, M., Cobb-Clark, D. A., Obst, C., Seitz, H., & Uhlendorff, A. (2020). Locus of control and investment in training. *Journal of Human Resources*, 0318-9377R2.
- Cohen, A. (2017). Organizational Commitment and Turnover: A Met A-Analysis. *Academy of Management Journal*.
- Cohen, E. (2017). *Employee training and development*. Routledge.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Routledge.
- Crawley, B. (2018). *The Manager's Guide to Human Beings*. Troubador Publishing Ltd.

- Creswell, J. W. (2014). *Qualitative, quantitative and mixed methods approaches*. Sage.
- Dalton, M. (2017). *Men who manage: Fusions of feeling and theory in administration*. Routledge.
- Dennis, K. A. (2020). *Differences in Turnover Intentions Between Nonmillennials and Millennials in Nonprofit Organizations*.
- Dhar, R. L. (2015). Service quality and the training of employees: The mediating role of organizational commitment. *Tourism Management*, 46, 419–430.
- Duarte, P., & Amaro, S. (2018). Methods for modelling reflective-formative second order constructs in PLS: An application to online travel shopping. *Journal of Hospitality and Tourism Technology*.
- Eagly, A. H., & Carli, L. L. (2018). *Women and the labyrinth of leadership*. Routledge.
- Egan, T. (2017). Training and Development in Nonprofit Organizations. *The Nonprofit Human Resource Management Handbook: From Theory to Practice*, 223.
- Ekhsan, M. (2019). The influence job satisfaction and organizational commitment on employee turnover intention. *Journal of Business, Management, & Accounting*, 1(1).
- Elnaga, A., & Imran, A. (2013). The effect of training on employee performance. *European Journal of Business and Management*, 5(4), 137–147.
- Elyousfi, F., Anand, A., & Dalmasso, A. (2021). Impact of e-leadership and team dynamics on virtual team performance in a public organization. *International Journal of Public Sector Management*.
- Evren, C., Evren, B., Dalbudak, E., Topcu, M., & Kutlu, N. (2022). Measuring dysfunctional grief due to a COVID-19 loss: A Turkish validation study of the Pandemic Grief Scale. *Death Studies*, 46(1), 25–33.
- Federici, E., Boon, C., & Den Hartog, D. N. (2021). The moderating role of HR practices on the career adaptability–job crafting relationship: a study among employee–manager dyads. *The International Journal of Human Resource Management*, 32(6), 1339–1367.
- Fink, L., Yogev, N., & Even, A. (2017). Business intelligence and organizational learning: An empirical investigation of value creation processes. *Information & Management*, 54(1), 38–56.
- Fischer, C. S., Hout, M., Jankowski, M. S., Lucas, S. R., Swidler, A., & Voss, K. (2020). *Inequality by design: Cracking the bell curve myth*. Princeton University Press.
- Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*.
- Gilbert, T. F. (2013). *Human competence: Engineering worthy performance*. John Wiley & Sons.
- Gill, D. L., Williams, L., & Reifsteck, E. J. (2017). *Psychological dynamics of sport*

and exercise. *Human Kinetics*.

- Giudici, M., & Filimonau, V. (2019). Exploring the linkages between managerial leadership, communication and teamwork in successful event delivery. *Tourism Management Perspectives*, 32, 100558.
- Greer, C. R. (2021). *Strategic human resource management*. Pearson Custom Publishing.
- Hair, Joe F, Page, M., & Brunsveld, N. (2019). *Essentials of business research methods*. Routledge.
- Hair, Joseph F, Sarstedt, M., & Ringle, C. M. (2019). Rethinking some of the rethinking of partial least squares. *European Journal of Marketing*.
- Hair Jr, Joe F, Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110.
- Hair Jr, Joseph F, Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. saGe publications.
- Hamidzadeh, A., & Mohammadnezhad Fadardi, M. (2019). The brand of a university as an employer. *Human Systems Management*, 38(1), 73–86.
- Han, F., & Ellis, R. A. (2022). The relations between self-reported perceptions of learning environment, observational learning strategies, and academic outcome. *Journal of Computing in Higher Education*, 1–15.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Hosain, M. S. (2016). Impact of best HRM practices on retaining the best employees: A study on selected Bangladeshi firms. *Asian Journal of Social Sciences and Management Studies*, 3(2), 108–114.
- Ibrahim, M. F., Kuan, G., Hashim, H. A., Hamzah, N. A., & Kueh, Y. C. (2021). Measuring achievement emotions questionnaire for physical education (AEQ-PE): a confirmatory study in Malay language. *BMC Public Health*, 21(1), 1–8.
- Ikramullah, M., Van Prooijen, J.-W., Iqbal, M. Z., & Ul-Hassan, F. S. (2016). Effectiveness of performance appraisal. *Personnel Review*.
- Islami, X., Mulolli, E., & Mustafa, N. (2018). Using Management by Objectives as a performance appraisal tool for employee satisfaction. *Future Business Journal*, 4(1), 94–108.
- Jaros, S. J., Jermier, J. M., Koehler, J. W., & Sincich, T. (2017). Effects of continuance, affective, and moral commitment on the withdrawal process: An evaluation of eight structural equation models. *Academy of Management Journal*.
- Jaworski, C., Ravichandran, S., Karpinski, A. C., & Singh, S. (2018). The effects of

- training satisfaction, employee benefits, and incentives on part-time employees' commitment. *International Journal of Hospitality Management*, 74, 1–12.
- Johari, J., Yean, T. F., Adnan, Z., Yahya, K. K., & Ahmad, M. N. (2012). Promoting employee intention to stay: Do human resource management practices matter. *International Journal of Economics and Management*, 6(2), 396–416.
- Karmakar, R. (2020). Redefining Organizational Commitment: Theory and Applications in Today's Organization. *ITIHAS-The Journal of Indian Management*, 10(2).
- Keskes, I., Sallan, J. M., Simo, P., & Fernandez, V. (2018). Transformational leadership and organizational commitment: Mediating role of leader-member exchange. *Journal of Management Development*.
- Khan, A., & Masrek, M. N. (2017). Training needs analysis based on mismatch between the acquired and required levels of collection management skills of academic librarians. *Collection Building*.
- Khan, G. F., Sarstedt, M., Shiau, W.-L., Hair, J. F., Ringle, C. M., & Fritze, M. P. (2019). Methodological research on partial least squares structural equation modeling (PLS-SEM). *Internet Research*.
- Khan, O., Daddi, T., & Iraldo, F. (2020). The role of dynamic capabilities in circular economy implementation and performance of companies. *Corporate Social Responsibility and Environmental Management*, 27(6), 3018–3033.
- Kim, E., & Tang, L. R. (2020). The role of customer behavior in forming perceived value at restaurants: A multidimensional approach. *International Journal of Hospitality Management*, 87, 102511.
- Kim, J., & Park, C. (2020). Education, skill training, and lifelong learning in the era of technological revolution: a review. *Asian-Pacific Economic Literature*, 34(2), 3–19.
- Kim, K., ElTarabishy, A., & Bae, Z. (2018). Humane entrepreneurship: How focusing on people can drive a new era of wealth and quality job creation in a sustainable world. *Journal of Small Business Management*, 56, 10–29.
- Korantwi-Barimah, J. S. (2015). *A framework for capacity building amongst academic staff in Ghanaian polytechnics*.
- Kriel, K. (2021). *The Structural Validation Of The Secure Base Leadership Scale Within The South African Context*. Stellenbosch University.
- Lamsal, B. (2022). Exploring issues surrounding a safe and conducive digital learning space in Nepal: A preparation for online education in the post-pandemic era. In *Socioeconomic Inclusion During an Era of Online Education* (pp. 246–263). IGI Global.
- Lazear, E. P. (2018). Compensation and incentives in the workplace. *Journal of Economic Perspectives*, 32(3), 195–214.

- Lugones, M. C., & Spelman, E. V. (2018). Have we got a theory for you! Feminist theory, cultural imperialism and the demand for “the woman’s voice.” In *Feminism and Philosophy* (pp. 494–507). Routledge.
- Lussier, K. (2019). Of Maslow, motives, and managers: The hierarchy of needs in American business, 1960–1985. *Journal of the History of the Behavioral Sciences*, 55(4), 319–341.
- MacKenzie, S. B., & Podsakoff, P. M. (2012). Common method bias in marketing: Causes, mechanisms, and procedural remedies. *Journal of Retailing*, 88(4), 542–555.
- Mansaray, H. E. (2019). The role of human resource management in employee motivation and performance-An overview. *Budapest International Research and Critics Institute (BIRCI) Journal*, 183–194.
- Martin, A. (2015). Talent management: Preparing a “Ready” agile workforce. *International Journal of Pediatrics and Adolescent Medicine*, 2(3–4), 112–116.
- Masri, H. A., & Jaaron, A. A. M. (2017). Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. *Journal of Cleaner Production*, 143, 474–489.
- Mazhisham, P. H., Khalid, M. Y., Nazli, N., Manap, R., & Hussain, N. H. M. (2018). Identification of Training needs assessment in organizational context. *IJTMSS*, 1(5), 20–30.
- MBITI, A. M. (2019). *Influence of human resource management practices on organizational performance: A case of universities in Machakos and Kitui counties, Kenya*.
- McDowell, W. C., Peake, W. O., Coder, L., & Harris, M. L. (2018). Building small firm performance through intellectual capital development: Exploring innovation as the “black box.” *Journal of Business Research*, 88, 321–327.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89.
- Mishra, A. (2018). A Study of Impact of Training & Development of Employee’s Learning Outcome in the Insurance Sector. *International Journal in Management & Social Science*, 6(1), 15–20.
- Morrison, G. R., Ross, S. J., Morrison, J. R., & Kalman, H. K. (2019). *Designing effective instruction*. John Wiley & Sons.
- Naim, M. F., & Lenka, U. (2018). Development and retention of Generation Y employees: a conceptual framework. *Employee Relations*.
- Nejati, M., Brown, M. E., Shafaei, A., & Seet, P.-S. (2020). Employees’ perceptions of corporate social responsibility and ethical leadership: are they uniquely related to turnover intention? *Social Responsibility Journal*.
- Nieves, J., & Quintana, A. (2018). Human resource practices and innovation in the hotel

- industry: The mediating role of human capital. *Tourism and Hospitality Research*, 18(1), 72–83.
- Noe, R. A., & Kodwani, A. D. (2018). *Employee training and development, 7e*. McGraw-Hill Education.
- Ocen, E., Francis, K., & Angundaru, G. (2017). The role of training in building employee commitment: the mediating effect of job satisfaction. *European Journal of Training and Development*.
- Papantymou, A., & Darra, M. (2017). Quality management in higher education: Review and perspectives. *Higher Education Studies*, 7(3), 132–147.
- Perlow, L. (2019). *Finding time*. Cornell University Press.
- Phillips, J. J., & Phillips, P. P. (2016). *Handbook of training evaluation and measurement methods*. Routledge.
- Pinheiro, R., & Pillay, P. (2016). Higher education and economic development in the OECD: policy lessons for other countries and regions. *Journal of Higher Education Policy and Management*, 38(2), 150–166.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569.
- Porat, E., Blau, I., & Barak, A. (2018). Measuring digital literacies: Junior high-school students' perceived competencies versus actual performance. *Computers & Education*, 126, 23–36.
- Price, C., & Whiteley, A. (2014). Corporate culture and employee identity: cooption or commitment through contestation? *Journal of Change Management*, 14(2), 210–235.
- Prifti, L., Knigge, M., Kienegger, H., & Krcmar, H. (2017). *A Competency Model for "Industrie 4.0" Employees*.
- Quendler, E., & Lamb, M. (2016). Learning as a lifelong process-meeting the challenges of the changing employability landscape: competences, skills and knowledge for sustainable development. *International Journal of Continuing Engineering Education and Life Long Learning*, 26(3), 273–293.
- Rabapane, M. V. (2020). *The effectiveness of community education services in influencing socio-economic issues in the Gravelotte Community*.
- Richelle, M. N. (2016). *BF Skinner-a reappraisal*. Routledge.
- Rodriguez, J., & Walters, K. (2017). The importance of training and development in employee performance and evaluation. *World Wide Journal of Multidisciplinary Research and Development*, 3(10), 206–212.
- Sabir, A. (2016). Understanding the value and formats of performance appraisals. *International Journal of Management Research and Reviews*, 6(2), 109.

- Sal, A., & Raja, M. (2016). The impact of training and development on employees performance and productivity. *International Journal of Management Sciences and Business Research*, 5(7).
- Sanghi, S. (2016). *The handbook of competency mapping: understanding, designing and implementing competency models in organizations*. SAGE publications India.
- Saraih, U., Zin Aris, A. Z., Sakdan, M. F., & Ahmad, R. (2016). Factors affecting turnover intention among academicians in the Malaysian Higher Educational Institution. *Review of Integrative Business and Economics Research*, 6(1), 1–15.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105–115.
- Schmidt, R. A., Lee, T. D., Winstein, C., Wulf, G., & Zelaznik, H. N. (2018). *Motor control and learning: A behavioral emphasis*. Human kinetics.
- Sengupta, A., Venkatesh, D. N., & Sinha, A. K. (2013). Developing performance-linked competency model: a tool for competitive advantage. *International Journal of Organizational Analysis*.
- Sharma, A., & Sharma, T. (2017). HR analytics and performance appraisal system. *Management Research Review*.
- Sharma, P., Kong, T. T. C., & Kingshott, R. P. J. (2016). Internal service quality as a driver of employee satisfaction, commitment and performance. *Journal of Service Management*.
- Sharma, R. K., & Chaturvedi, S. K. (2017). Factors leads to attrition and retention of academic staff at higher educational institutes in Uttar Pradesh. *International Journal of Applied Research*, 3(4), 1–7.
- Shiau, W.-L., Sarstedt, M., & Hair, J. F. (2019). Internet research using partial least squares structural equation modeling (PLS-SEM). *Internet Research*.
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. *European Journal of Marketing*.
- Sikora, D. M., Thompson, K. W., Russell, Z. A., & Ferris, G. R. (2016). Reimagining overqualified human resources to promote organizational effectiveness and competitive advantage. *Journal of Organizational Effectiveness: People and Performance*.
- Sohn, C., Christopoulos, D., & Koskinen, J. (2020). Borders moderating distance: a social network analysis of spatial effects on policy interaction. *Geographical Analysis*, 52(3), 428–451.
- Sparks, W. L., & Repepe, J. F. (2016). Human motivation and leadership: Assessing the validity and reliability of the actualized leader profile. *Academy of Educational Leadership Journal*, 20(3), 23–43.

- Spring, M., Hughes, A., Mason, K., & McCaffrey, P. (2017). Creating the competitive edge: A new relationship between operations management and industrial policy. *Journal of Operations Management*, 49, 6–19.
- Stoyanov, S. (2017). *An Analysis of Abraham H. Maslow's A Theory of Human Motivation*. CRC Press.
- Strauss, A. L. (2017). *Careers, personality and adult socialization*. Routledge.
- Stronge, J. H., & Xu, X. (2021). *Qualities of effective principals*. ASCD.
- Sung, S. Y., & Choi, J. N. (2014). Do organizations spend wisely on employees? Effects of training and development investments on learning and innovation in organizations. *Journal of Organizational Behavior*, 35(3), 393–412.
- Suryani, N. (2020). The effect of teacher competence and motivation on performance through work satisfaction of teachers at Junior High School 7 Jakarta. *Global Journal of Engineering and Technology Advances*, 5(3), 129–140.
- Usakli, A., & Kucukergin, K. G. (2018). Using partial least squares structural equation modeling in hospitality and tourism. *International Journal of Contemporary Hospitality Management*.
- Vveinhardt, J., & Andriukaitiene, R. (2017). Management culture as part of organizational culture in the context of corporate social responsibility implementation. *Economics & Sociology*, 10(3), 294–320.
- Wang, C., Xu, J., Zhang, T. C., & Li, Q. M. (2020). Effects of professional identity on turnover intention in China's hotel employees: The mediating role of employee engagement and job satisfaction. *Journal of Hospitality and Tourism Management*, 45, 10–22.
- Wang, Y. (2020). Observations on the organizational commitment of Chinese employees: comparative studies of state-owned enterprises and foreign-invested enterprises. In *Human Resource Management in China Revisited* (pp. 33–53). Routledge.
- Wilensky, H. L. (2015). *Organizational intelligence: Knowledge and policy in government and industry* (Vol. 19). Quid Pro Books.
- Wongnaa, C. A., & Boachie, W. K. (2018). Perception and adoption of competency-based training by academics in Ghana. *International Journal of STEM Education*, 5(1), 52.
- Wynen, J., Boon, J., & Verlinden, S. (2022). Reform Stress in the Public Sector? Linking Change Diversity to Turnover Intentions and Presenteeism Among Civil Servants Using a Matching Approach. *Public Performance & Management Review*, 1–33.
- Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: literature review. *Journal of Management Development*.
- Zhu, X., Zhang, P., Wei, Y., Li, Y., & Zhao, H. (2019). Measuring the efficiency and

driving factors of urban land use based on the DEA method and the PLS-SEM model—A case study of 35 large and medium-sized cities in China. *Sustainable Cities and Society*, 50, 101646.

Zortea, T. C., Gray, C. M., & O'Connor, R. C. (2019). Adult attachment: Investigating the factor structure of the Relationship Scales Questionnaire. *Journal of Clinical Psychology*, 75(12), 2169–2187.

LIST OF PUBLICATIONS

[1] **Owusu, V. K., & Gregar, A. (2021).**

Measuring the antecedents of turnover intentions: Perspectives of private healthcare employees in a less developed economy. *Problems and Perspectives in Management*. Vol. 19, issue 4, pp. 232-247
ISSN:1727-7051

[2] **Owusu, V. K., Gregar, A., & Ntsiful, A. (2021).**

Organizational diversity and competency-based performance: The mediating role of employee commitment and job satisfaction. *Journal of Management & Marketing. Challenges for the Knowledge Society*. Volume & Issue: Vol. 16 - Issue 4, pp. 352 - 369
ISSN 2069–8887

Conference Proceedings

[1] **Owusu, V.K, Gregar A. & Asante K. (2022)**

Cyber-Security Training and Organizational Performance: A Perspective from Developing Economy.
British Academy of Management Conference (BAM)
Manchester, UK

[2] **Owusu, V.K, Gregar A. (2021)**

Organizational diversity, job satisfaction and employee commitment: A conceptual framework.
The 4th International Conference on Economics and Social Sciences Resilience and economic intelligence through digitalization and big data analytics,
Bucharest University of Economic Studies, Romania.

[3] **John AMOAH^{1*}, Abdul Bashiru JIBRIL², Victor Kwarteng OWUSU³, Michael A. ODEI⁴, Felicia NAATU⁵ (2021)**

COVID-19 pandemic and future business prospects: A conceptual study
The 4th International Conference on Economics and Social Sciences Resilience and economic intelligence through digitalization and big data analytics.
Bucharest University of Economic Studies, Romania.

- [4] **Owusu, V.K, Gregar, A. (2020)**
 Does Gender Influence Leadership Style to Aid Performance in Organizations? A Literature Review
 3rd International Conference on Gender Research (ICGR)
 Reading, UK
- [5] **Owusu, V.K Gregar, A (2019)**
 Analyzing mentee-mentor cooperation for organization Mentee-Mentor Cooperation, Mentee Benefit and Organizational Performance: A Literature Review.
 15th International Bata Conference for Ph.D. Students and Young Researchers (DOKBAT),
 Zlin, Czech Republic
- [6] **Owusu, V. K, Gregar A, (2019)**
 The Impact of Training and Development on job Performance; A Conceptual Study in an Academic Institution.,
 10th international conference on applied economics: Contemporary issues in economy;
 Torun, Poland

AUTHOR'S CV

Victor Kwarteng Owusu

Address1: G17, Atwima Boko, P.O. Box 10018, Adum Kumasi.
 Ghana.

Address 2: Mostni 5139, 760 01 Zlin
 (Czechia)

victorkwarteng_owusu@yahoo.com, owusu@utb.cz
 0420775180371

00233542490579, (WhatsApp),

EDUCATION

2018- ongoing Tomas Bata University, Zlin, Czech Republic

Thesis; The Relation of Performance and Training and Development Activities in Selected Public Universities in Ghana

2015-2017 University of Education Winneba

MBA, Human resource and organisational behaviour, Ghana.

Dissertation; The impact of training and development on job performance: University of cape coast as a case study.

2002-2006 University of cape coast (U C C) cape coast

BSc. Entomology and wildlife, Ghana.

1998-2000 Konongo Odumasi secondary school (KOSS) Odumasi,

Senior secondary certificate examination (S.S.C.E), Ghana.

RESEARCH WORK

- The Relation of Competence-Based Performance and Training & Development in an Emerging Economy.
- **GRANTS**

Internal Grant Agency (IGA) – Tomas Bata University.

Lead Researcher.

LANGUAGES

(English, Advance)

(Asante Twi) (mother tongue)

INTERESTS

- Research, Teaching, Cooking, Soccer, Debating

REFEREES

Assoc. Prof. Aleš Gregar

Faculty of Management and Economics, Tomas Bata University in Zlín

Mostní 5139, 760 01 Zlín, Czech Republic

Czech Republic

Tel. +420576032227

email: gregar@utb.cz

Assoc. Prof. Majed Ali

Essex Business School (ESB), Essex University, Colchester Campus

United Kingdom (U.K)

Tel. +44(0)1206874765

email: maaali@essex.ac.uk

Rev. Dr. Gyasi Nimako

Faculty of Business Education, University of Education Winneba,

Kumasi Campus., P. O. Box 1277, Kumasi

Ghana

Tel.+233261713782

email: sim.ekomerce@gmail.com

Victor Kwarteng Owusu, Ph.D.

**The Relation of Performance and Training and Development
Activities in Selected Public Universities in Ghana**

Vztah výkonnosti a vzdělávacích a rozvojových činností na vybraných
veřejných vysokých školách v Ghaně

Doctoral Thesis Summary

Published by: Tomas Bata University in Zlin
nam. T. G. Masaryka 5555, 76001 Zlin

Edition: published electronically

1st edition

Typesetting by: Author

This publication has not been subjected to proofreading nor editorial review.

Year of publication: 2023

ISBN 978-80-7678-173-3

