

# Institutional Strategies and Graduate Employability Development Skills of Business Students: The Mediating Role of Graduate Capital Forms

Dr. Esther Asiedu<sup>1\*</sup>, Afia Nyarko Boakye<sup>2</sup>, Ebenezer Malcalm<sup>3\*</sup>, Cornelius K. Amoah<sup>4</sup>

<sup>1,2,3</sup> Department of Management Studies, Ghana Communication Technology University

<sup>2</sup> Ghana Communication Technology, Tesano, Accra, Ghana

\*Corresponding author; Email: [esaiedu011@gctu.edu.gh](mailto:esaiedu011@gctu.edu.gh)



Received: 10 March 2023

Revision: 15 May 2023

Accepted: 20 June 2023

Available Online: 06 August 2023

Published: 04 September 2023

Volume-4, Issue-3



Cite This: *ICRRD Journal*, 2023, 4(3), 157-181

**ABSTRACT:** This study aims to assess the effect of institutional strategies on the development of employability skills, mediated by graduate capital forms among business education students in some selected public and transnational universities in Ghana. Institutional theory underpinned this study. The institutional strategy constructs of curriculum design, extracurricular activities, work-integrated learning, internship and job placement, university engagement with industries, career centers, and student engagement with employability development opportunities predicted the dependent variable graduate employability with the mediating variables. On a sample of 1280 survey participants, structural equation modelling was used. The findings showed that all of the constructs included in institutional strategies had a favourable, significant impact on the growth of graduate employability abilities. The development of social, cultural, and psychological capital forms under the mediating variable was supported to have an indirect influence or partial mediation between institutional tactics and the development of graduate employability abilities. The findings recommend public universities should be more proactive in promoting the employability agenda by assisting students in building their employability skills in a digitalized world. Again, regulators and decision-makers like the Ministry of Education (MoE) and the Ghana Tertiary Education Commission (GTEC) should reconsider making the development of employability skills in the academic fields of undergraduate education that reflect and merit the rapidly changing skill requirements of contemporary and digitalised work environments, especially curriculum design.

**Keywords:** Mediating analysis, graduate capital forms, graduate employability; institutional strategies; human capital; social capital, psychological capital, identity capital

## Introduction

Higher education institutions (HEI) all over the world have made graduate employability (GE) and employment outcomes (EO) a strategic focus because it is generally assumed that employers want to hire graduates who can function well in today's erratic, ambiguous, sophisticated, and uncertain world (Römgens et al., 2020). Graduate employment rates are becoming more important in university

rankings, government funding, industry quality standards, and university promotional strategies (Sin et al., 2019). On the other hand, the rate of graduate employment is a subpar indicator of how equipped university graduates are for success in the workforce (Bridgstock & Jackson, 2019; Donald, Baruch & Ashleigh, 2019; Healy, Hammer & McIlveen, 2022). It is rather essential to make a distinction between employment as a result, which relates to graduates' capacity to meet their professional and employment goals, and employability as an antecedent, which refers to a range of personal attributes and environmental circumstances (Clarke, 2018; Donald, Baruch & Ashleigh, 2019; Monteiro et al., 2020). It is undeniable fact that HEI is under the obligation to produce employable graduates, with graduate employability being the predominant paradigm at the level of developing graduates' abilities, competencies, and attributes which is a global corporate mandate for HEI (Nataa Lackovi, 2019). Policymakers and academics generally consented that graduate employability skills are crucial in the corporate world (Römogens et al., 2020; Abelha et al., 2020) and that higher education institutions should indeed prepare graduates for jobs that do not yet exist and to find solutions that no one has yet thought of (Damoah et al., 2021).

Additionally, studies by van der Heijden (2021) reinforces governments' and employers' appeals to universities to boost graduate career opportunities by fostering both general and discipline-specific employability skills. This argument is supported by Fresnoza (2021), who urges educational institutions to highlight graduates' transferrable cognitive and socio-behavioral talents, including critical thinking and problem-solving, as well as teamwork, resilience, self-confidence, and self-expression. Despite this, there is a dearth of research on the effectiveness of the strategies and techniques used by institutions to produce employable graduates. Employability skills are necessary for graduates to survive in the age of digital transformation, thrive in the competitive business world, and be successful. However, graduate employability policy, strategy, and practise unquestionably undermine universities' initiatives, programmes, and academic discourse. According to Bridgstock and Jackson (2019), the principal purposes of HEI employability programmes are short-term employment outcomes, professional readiness, and living and working productively and meaningfully throughout one's lifetime. Regardless of how well articulated a goal might be, institutions have varying unstated and implicit approaches within and between institutions.

Employability Development Skills Programmes (EDSP) or Employability Development Opportunities (EDO) are available at higher education institutions (HEI) all over the world to improve students' employability. One of them is the development of career centers, as well as optional or required employability programmes, certain topic disciplines linked with employability activities, and various forms of work-integrated learning (Smith et al., 2018; Jackson & Dean, 2022). The focus is increasingly on strengthening employability skill sets in degree programmes to improve students' job outcomes and prepare them for the workforce after they complete their studies (Holmes, 2017; Tran, 2019).

Graduates who are in the "work-ready-mode" are capable of achieving economic and financial independence and making a meaningful contribution to society since they have acquired the necessary skills and experiences. This requires that the future workforce and the changing nature of the workplace must be carefully considered in the curriculum design of HEI. Even though, higher education is changing, current significant changes and labour market demands have placed a greater emphasis on skills and related stakeholder contributions than on institutional techniques for producing marketable graduates (Rowe & Zegwaard, 2017). This clearly encourages students to choose jobs and learn skills that can become obsolete owing to automation, making the learned skills

useless (Rock, 2019). According to research, higher education institutions (HEI) prioritise graduate employability as part of their strategic goal in response to demand from the political, economic, and social spheres to generate employable graduates on a worldwide scale. Employers are expecting HEI to develop students' skills outside of their field of study, and graduates themselves are encouraged to develop those skills in order to compete in the dynamic, competitive workplace. As a result, graduate employability development is regarded as a strategic institutional requirement for HEI (Suleman, 2018; Behle, 2020).

Klees et al. (2019) highlighted the significance of tertiary education in fostering the development of transferable cognitive skills (critical thinking and problem-solving) as well as socio-behavioral skills (teamwork, resilience, self-confidence, negotiation, and self-expression), which are crucial for recent graduates' employability. The study's assessment of how the nature of work has evolved in response to tertiary education identified three methodologies. The demand for higher-order general intellectual capacities, such as complex problem-solving, critical thinking, and sophisticated communication, has increased because of technological advancement and integration. The above attributes are transferrable across industries but cannot simply be accumulated through formal education. University graduates earn significantly more than less educated folks because of the greater demand for these capabilities, which lessens inequality. Second, higher education increases a person's motivation to keep learning throughout their lives. Workers are expected to have several careers throughout their lives, not just several jobs. Tertiary education, which provides a wide variety of course options and flexible delivery modalities including online learning and open institutions, fills this rising need. Thirdly, higher education especially universities has become increasingly desirable in the evolving employment landscape by serving as a platform for innovation. How effectively postsecondary education systems function on these three fronts will determine their significance for the future of work. Skills acquisition is rapidly evolving into a continual process as opposed to a predetermined, unalterable course. By making sure that the doors to alternative pathways do not inescapably close when one track is opened, flexibility in students is increased.

Ghanaian universities were deemed to have relatively hypothetical curricula by the British Council's (2013–2016) project on the Universities' Employability and Inclusive Development, making it challenging to produce creative graduates and business owners. The study claims that Ghanaian universities are unable to create graduates who can be employed for a wage or on their own. Furthermore, there is no strategy on graduate employability strategies in Ghana's higher education regulatory bodies namely, the National Accreditation Board (NAB) now Ghana Tertiary Education Commission (GTEC) in 2020. (British Council, 2015). In another study, Baah-Boateng (2013) reported that there is a weak link between schools, universities, and businesses as a result of discrepancies between the skills that employers desire, and those that graduates exhibit. The quality of higher education institutions' offerings, which place a strong emphasis on employability and labour market trends to help graduates succeed in their chosen jobs, is what mostly determines how employable graduates are (Bennett, 2019).

Teye-Kwadjo (2021) reports that only 10% of university graduates find employment after their first year of study. A significant portion takes ten years to do so due to a number of difficulties, such as lack of employability skills, lack of funding capital for entrepreneurial endeavours, poor graduate

attitudes toward their jobs, and the industry's inability to absorb the numbers required to support the e-commerce industry.

According to Artess et al. (2016), graduate employability depends on more than only the information and skills they have received via their institutions. It also depends on various employability-enhancing tactics developed by universities. Some scholars contend that certain capital assets or forms are important for graduates' employment (Bakari & Khoso, 2017; Tomlinson, 2017). These capital kinds include human capital, social capital, cultural capital, identity capital, psychological capital, and social capital. Weller (2019) asserts that the production and use of capital have the potential to improve their variety of options and their capacity to act in ways that are economically viable. Capital may have an impact on how people learn to develop employable skills, according to Jackson and Tomlinson (2022).

A graduate from a university will also believe himself to be more employable if his level of capital, which includes human, social, cultural, psychological, and identity capital, is higher. Capital forms may therefore act as a mediator in the connection between institutional policies and graduate employability.

However, in empirical research on the employability of graduates, capital forms have gotten very little attention (Bakari & Khoso, 2017). Therefore, the main goal of this article was to fill up this gap in the literature by examining the amount to which capital forms mediate the relationship between institutional tactics and graduate employability, whether entirely or in part.

A university graduate will also perceive himself as being more employable if his level of capital, including human, social, cultural, psychological, and identity capital, is higher. Capital forms may therefore act as a mediator in the connection between institutional policies and graduate employability.

On the one hand, this work advances our understanding of the function that capital forms ought to play in business students' models for developing their graduate employability abilities. The additional objective is to ascertain which of the capital types (human capital, social capital, cultural capital, psychological capital, and identification capital) mediates the relationship between institutional strategies and graduate employability. It moreover aids in conveying to policymakers the optimum capital types that can boost graduate employability. The remainder of the paper is divided into the following sections. The literature review that follows examines theoretical and empirical research on capital forms, institutional tactics, and graduate employability. Methods, materials, and findings from the estimation of model parameters follow. Discussions and recommendations are at the end of the paper.

## **Theoretical Literature Review**

### **Institutional Theory**

Researchers in higher education have applied institutional theory to a wide range of organisational problems. The institutional theory of how normative expectations shape structures, behaviours, and beliefs was defined by Lok (2019). It is constructed on the foundation of a realist ontology. Wilkins and Huisman are two authors that have written on this subject (2012). According to Suddaby (2010), one

of the fundamental goals of institutional theory is to explain how an organization's structure and activities create meaning and continuity beyond its technical objectives. According to Scott (2013,p56), "institutional theory assumes that institutions' regulatory, normative, and cultural-cognitive features, when combined with related activities and resources, supply social life with stability and importance". Regulatory, normative, and cultural-cognitive are the three foundations that Scott (2013) outlined. However, habitual disposition, the fourth pillar, merits further study. Because university institutions and norms clearly define academic programmes, lecturers, administrators, and resources needed to ensure the rise of graduate employability, this theory focused on universities as a key stakeholders in students' development of employability. The regulatory system with high expectations explains how organisations use rules, guidelines, standards, and codes of conduct, as well as monitor, reprimand, and reward their members' behaviour in this case, students.

The institution's mission and aims are established by the normative pillar. In order to prepare students for the workforce, the workplace, and lifelong learning, universities must enhance their knowledge, abilities, and personal qualities through learning. The cultural-cognitive system, which guarantees that when people collaborate, they develop strong bonds and partnerships, serves as the third pillar. This is crucial because students interact with institutions in a way that promotes knowledge, abilities, and characteristics for socioeconomic development (Tomlinson, 2016). Isomorphism describes how organisations and people from various cultural and geographic backgrounds share and embrace new concepts and behaviours. According to DiMaggio and Powell (1983), the iron cage revisited describes institutional isomorphism and collective rationality in organizational fields as the coercive, mimetic, and normative mechanisms of neo-institutional theories and isomorphism highlight the difficulties of these theories and isomorphism. Even when institutions adjust to changes in the external environment, such as those in government education policy, it is still important to take into account their mission, and vision and programmes because these factors are crucial to their operations.

Contrarily, critics of institutional theory are rooted in a liberal intellectual tradition with onto-epistemological presuppositions that give little weight to reflection and assume a neo-positivist myth of objectivity, preventing critical self-reflection (Willmott 2019). Lok (2019) contends that in order to address institutional theory's shortcomings, theorists should concentrate on social effect in order to address problems like marginalisation, exclusion, and power.

Despite the ongoing debates and contestations, the researcher used institutional theory as a theoretical framework to evaluate the role of universities as institutions and to identify any potential issues with the strategies, structures, and policies for producing employable graduates from Ghana's Public and TNE Universities.

## **Empirical Literature Review**

### **Defining "Employability"**

The word "employability" has many meanings in different cultures. A graduate is stated to be more likely to find and hold a job if they have a certain combination of skills, knowledge, understanding, and personal qualities, according to the definition of employability (Holmes, 2017). Because it is a quality that promotes success in both the job and in life as a whole, employability is also known as "skills for life" (Bridgstock, 2019). The term is used more broadly to describe societal contributions and

advantages for groups other than students, such as the labour force, society, and economy (Clarke, 2018).

The vast majority of universities use a myriad of employability strategies, which differ by institution as well as within that institution by subject and degree programmes, according to Jackson and Dean (2022). The development of disciplinary capabilities appropriate for professional practise within the curriculum as well as generic and transferable skills like teamwork and problem-solving, which are adaptable and advantageous across many career contexts, have been the focus of skills-based employability techniques (Tran, 2019). The graduates are required to be successfully mobilised in the workplace for them to become competent (van der Heijden, 2021). They are supported by a variety of endearing qualities like resilience, creativity, and initiative (Walker & Fongwa, 2017). The skills that many universities throughout the world are looking for in graduates are outlined in statements on graduate attributes.

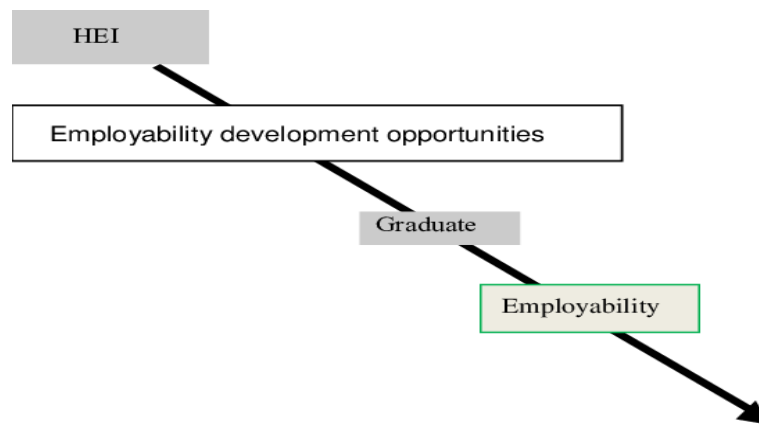
### **Graduate Employability Models**

Various employability models have been emphasised in the theme of evaluating the pertinent literature. There are several of them, including Process Model-Dams 2004, Domain-Independent Model, Graduate Employability Model, Haque Employability Model, Attitude-Skills-Knowledge Framework, Heuristic Model, Integrated Graduate Employability Model, Graduate Capital Model, Career-Edge, USEM, DOTS Model, Graduate Employability Development Strategies, and Magic Bullet. On the development of students' employability in Ghana, six of the models or frameworks have been found to have a significant effect.

#### **The Magic Model**

Harvey (2002) presented the Magic Bullet Strategy, a straightforward framework for increasing graduate employment. This paradigm supports the notion that a college degree can assist students in acquiring employability skills that result in employment. This model demonstrates how Higher Education Institutions (HEI) assist graduates in developing their employment abilities. The model, however, says nothing about the development strategies referred to as employability development strategies in this study. A variety of approaches are needed to effectively enhance graduate employability due to the diversity of higher education institutions and students (Harvey, 2002). Figure 1 depicts the Magic Bullet model.

#### ***Figure 1 Magic Bullet Model of Employability***



Sources: Harvey (2002)

### Graduate Employability Development Strategies

The authors took into account every significant factor and relationship element when establishing graduation attributes. The three main participants in this process are employers, graduates, and HEIs. Using the opportunities offered by HEIs and developing their abilities through extracurricular activities, graduates are accountable for their own employability engagement, according to this paradigm. The acquisition of employability traits, job experience, self-promotion and career management skills, as well as a readiness to learn and reflect on learning, were identified by the authors as employability development activities.

Mane and Miravet (2016) look into the substance of people's human capital using the job needs approach and matched employer-employee data. They show that depending on the employee's position within the organisation, the return on employable talents changes. They learned that employability skills pay dividends and are taken into account by all employers.

In their study "Employing the 'unemployable': employer attitudes of Malaysian graduates," Kee-Cheok Cheong et al. (2016) discovered that many Malaysian graduates are employed because of their communication, analytical, and critical thinking capabilities. In a 2016 study, Noor Lela Ahmad and Suraini Mohd Rhouse examined the employability of graduate accounting students. They look at the professional skills that the students need to succeed in the workplace. It was discovered that pupils had poor intellectual, interpersonal, and personal capabilities as well as poor administrative and information technology skills. As a result, they observe a gap between student needs and employer expectations for professional skills.

Jackson (2016) offers an illustration of how graduate capabilities might well be leveraged in the workplace. Several factors, including communication, self-awareness, critical thinking, data analysis, and the use of technology, are found to have an impact on how productive a person is in their line of work. The significance of technical skills and employability abilities was examined by Zaliza Hanapi and Arasinah Kamis (2017) in a comparison between industry, lecturer, and graduates. The relevance of information management skills, self-management skills, moral and ethical skills, and entrepreneurial skills was observed to be viewed differently by employers, alumni, and Community College professors. Skills in teamwork, collaboration, and leadership are required rather than communication, creative thinking, and critical thinking.



Hassan et al., (2018) identify the Technology-enabled / Enhanced Active Learning component (TEAL). The results demonstrate that this TEAL component will assist institutions in encouraging students to participate in active learning. Share (2018) investigates whether there is a mismatch between the competencies and abilities offered to business students by business colleges and the demands of the labour market today. The results show a discrepancy between the talents and competencies of business students and the abilities and competencies demanded by employers.

Damoah et al. (2021) investigate how employers in Ghana see the provision of graduate students with employability skills through higher education. In order to examine how Ghanaian employers see the importance they place on particular employability skills, the study used survey data and paired t-test analysis. The results demonstrate that when one progresses through higher education, one gains more knowledge on an individual level as well as enterprise leadership, numeracy skills, technical management, communication skills, creativity, and innovation abilities.

The number of universities, according to Farenga and Quinlan (2016), implement a range of employability strategies that differ by the institution as well as within that institution by subject and degree programmes. The focus of skills-based employability strategies has concentrated on the development of disciplinary skills required for professional practice within the curriculum as well as generic and transferable skills, like teamwork and problem-solving, which are applicable and useful across multiple employment contexts (Clanchy & Ballard, 1995; Jackson, 2016). To develop competence, these must be successfully employed in the workplace (van der Velden, 2013).

While knowledge and skills are traditionally the main focus of higher education, several universities have recently begun to make strides in influencing many other factors that have an impact on graduates' employability. Being an "entrepreneurial university," which entails boosting the economic and consequently the employment capacity of a local region through research-based innovation, knowledge exchange, and direct commercial action or directly creating jobs, hiring its own students and graduates, and being a "job creator" (Etzkowitz, 2016).

Finding employment for graduates and current students is indeed the objective of many universities' internal employment centers and recruitment firms. Some of these companies focus their recruitment efforts particularly on university students from various groups who could encounter obstacles in the labour market. Incubators and programmes for student entrepreneurs are intended to assist students to find their own independent jobs. Through career fairs, industry networking engagements, industry mentoring programmes, and work-integrated learning (WIL) opportunities like placements and internships, students can enhance their social capital and professional networks while also developing their skill sets (Kinash et al.,).

### **Graduate Capital Forms**

The five forms of capital that Tomlinson (2017) identified are human capital, social capital, cultural capital, identity capital, and psychological capital and their relationships with graduate employability are shown in Figure 1 below. The knowledge and skills graduates acquire to position themselves for employment are known as human capital. Graduates from vocation-related courses often have a straightforward ability to apply technical knowledge when they begin working, compared to individuals from general education disciplines, which lack a direct path for employable knowledge

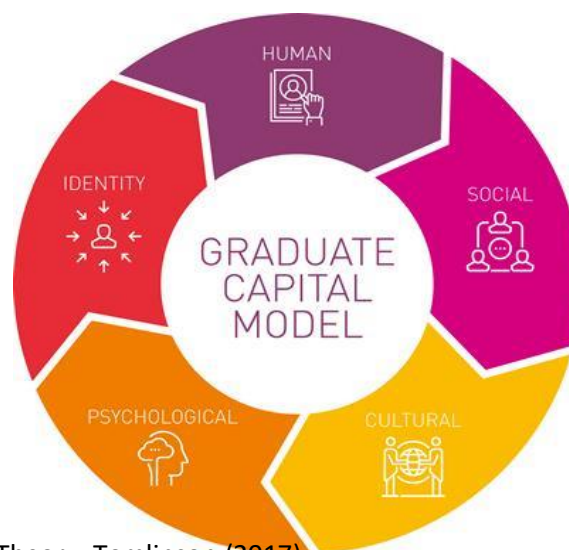


(Tomlinson, 2017). Once more, social capital is the ability of a student to build social networks and relationships that will advance their knowledge and provide access to jobs and other objectives. Students who have a high level of cultural capital could therefore present captivating profiles while also being attuned to the cultures of numerous organisations and industries.

Additionally, psychological capital is the capacity to enter and adjust to a fluid job market as well as the endurance of challenges and pressures, according to Tomlinson (2017). Last but not least, identity capital aids learners in comprehending their experiential values and accomplishments to aid in the creation of a professional profile and the building of plans for achieving career objectives. Higher education institutions continue to be acknowledged for having a big influence on graduates' employability and job prospects. Importantly, if it is directed by professional capital practitioners, a new vocabulary may be adopted by students and recent graduates and used to frame the management of their employability.

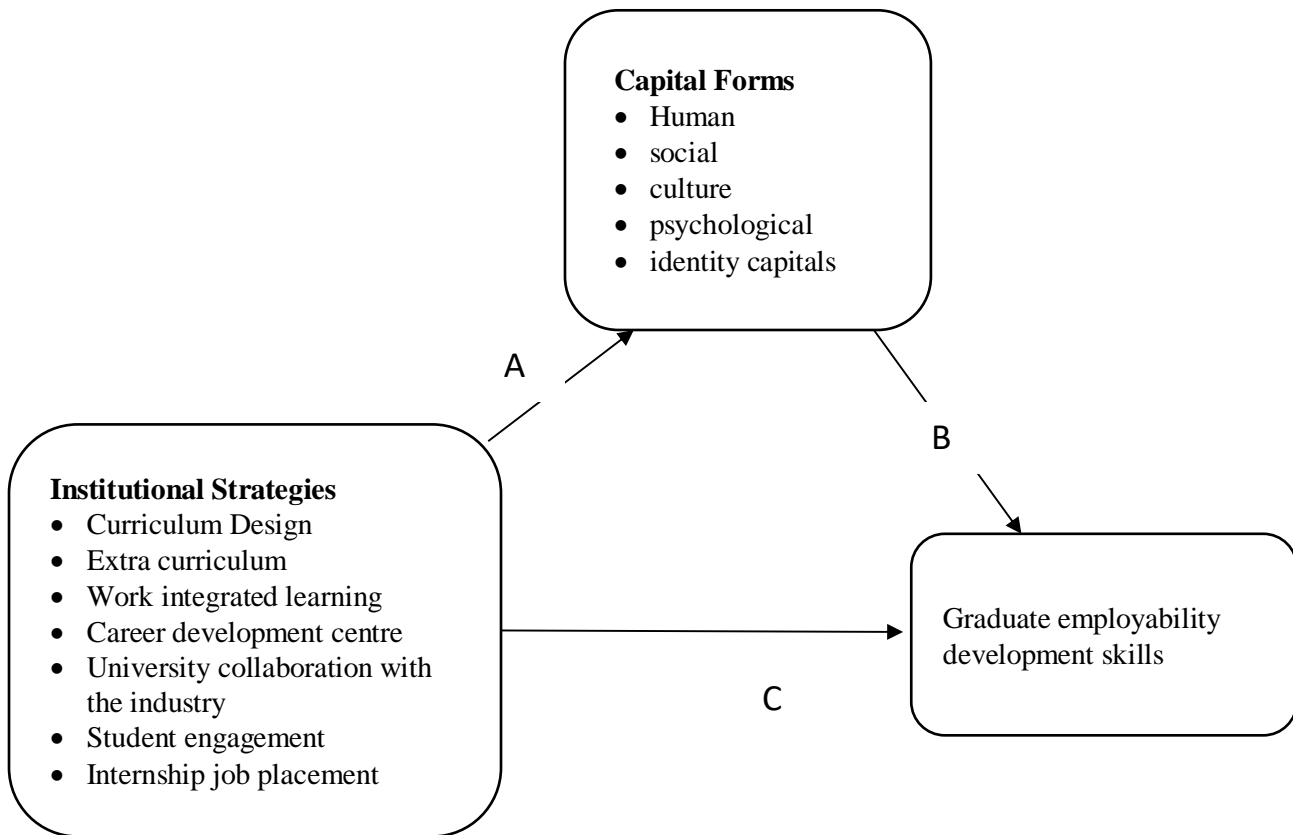
International students have not been included in the application of Tomlinson's model, which was created primarily to help understand the employability of domestic graduates. However, the model identifies the kinds of capital that overseas students were found to possess in our earlier and more recent study (Pham, Tomlinson & Thompson, 2019; Pham & Jackson, 2020). Figure 3 shows a graphic representation of the study's potential research model.

**Figure 2 depicts the Graduate Capital Form as core capital for developing graduate employability.**



Source: Graduate Capital Theory, Tomlinson, (2017)

**Figure 3: The Path Model for the Mediation Analysis**



**Source: Authors Modification (2022) from Kinash et al., (2016) Tomlinson (2017)**

**A:** This represents the relationship between the institutional strategies on graduate capital forms

**B:** It shows the relationship between the graduate capital forms on graduate employability skills development of business students,

**C:** This represents the relationship between the institutional strategies on the graduate employability skills development of business students.

### Material and Method

This section focuses on the research methods of the study and includes the research design, variable measurement, and ultimately, the estimating strategy employed in this work. The paper used a panel estimation method.

### Research design

Explanatory research designs examine the nature and direction of the link among the variables under examination. For this reason, this study used an explanatory research design. The impact of capital

forms on the connection between institutional strategies and employability was therefore evaluated using the explanatory research design.

### **Research Setting and Study Population**

Greater Accra, Region of Ghana was the study's geographic focus, and universities and graduate employability strategies were its subject matter variables. The study population consists of Level 400 students in their final years pursuing business-related subjects at selected public and international universities in the Greater Accra Region, as well as Heads of Department and Career Advisors. The population of the study was compiled from enrollment data from Ghana's higher institutions across a number of fields (Statista, 2020). A total of 50101 students are enrolled in business education in Ghana, according to data compiled by the Ghana Tertiary Education Commission (2019), formerly the National Accreditation Board (NAB), by institution, programme, and gender.

### **Sampling Strategy**

The study then used a systematic sample random strategy to select Level 400 students who were pursuing business education from the University of Ghana, University of Professional Studies Ghana (UPSA), Lancaster University Ghana, and Webster University Ghana, regardless of specialisation. The selection of final-year students was based on the supposition that they would have three years of university experience, be able to assess the acquired employability skills, and be able to make an informed decision regarding institutional practices and pedagogical effects on curriculum design, extracurricular activities, work-integrated learning, career services, professional bodies, and the impact of universities' partnerships with industries on graduate employability development.

### **Sample Size Determination**

According to Sekaran and Bougie (2016), the sample size is crucial in determining the sample's suitability for generalisation. If the researcher does not use the appropriate sampling strategy, the study's findings cannot be extended to the full population. To attain the required level of accuracy and confidence, the researcher selected the appropriate sample size.

The sample size for the study was calculated using the Saunders, Lewis, and Thornhill (2007) sample size determination table, and it was found to be 1655 with a 99% level of confidence and a 1% margin of error. The sample size was decided upon proportionally while accounting for the various universities. The sample size included two public universities and two TNE institutions.

### **Methods of Data Analysis**

To ensure that the primary data was free of errors and outliers, it was cleaned (Saunders et al 2009). The descriptive analysis was conducted using SPSS version 26 (Statistical Package for Social Science). The SPSS programme is incredibly capable of analysing massive amounts of data and presenting statistical results in straightforward frequency distribution tables, including polygons, binomials, percentages, pie charts, and other types of tables.

### **Structural Equation Modelling Analysis**

A series of dependent connections can be simultaneously estimated using the structural equation model (SEM), a multivariate technology that combines elements of multiple regression and factor analysis (Zhang, 2022). Due to the complexity of SEM, many equations were fitted into models as standardised linear SEMs or generalised SEMs using either continuous or ordinal data.

A Structural Equation Model (SEM) was utilised to examine the study's hypothesis for the inferential part of the research (Lomax, 2018). models that depict how different variables relate to one another in order to test a hypothesis. To show the relationship between measured variables and latent components, the structural equation model (SEM), a multivariate analysis tool, combines factor analysis with multiple regression analysis. The two types of variables employed are endogenous and exogenous. Researchers can estimate numerous related dependencies in a single examination, which is advantageous. A model is usually shown in a graphical path diagram by the SEM framework, which is a helpful tool for statistical analysis.

It provides researchers with more flexibility in evaluating multi-collinearity when compared to multiple regression (Hair et al. 2013). With greater recognition for the reliability and validity of the observed score from the measurement to be rigorously achieved, it is more advanced in terms of examining a complex theoretical model and intervening a hypothesised dependent variable to an independent variable to test a serial correlation.

The confirmatory Analysis (CFA) model is presented in equation (1) as

$$Y = BY + \Gamma X + \alpha + \zeta \quad (1)$$

where  $Y$  is the endogenous variable (Graduate employability development skills and capital forms),  $X$  is the exogenous variable (institutional strategies graduate and capital forms). The coefficient of  $Y$  is  $B$  and the coefficient of  $X$  is  $\Gamma$ . The intercepts are represented by  $\alpha$  and  $\zeta$  is the error term.

### Mediation Variable – Graduate Capital Forms

As a mediating variable in the study, graduate capital forms helped to explain how the independent and dependent variables were related. The added intermediate provided an explanation for the relationship between the predictor and criterion. Researchers occasionally incorporate intermediary variables between the independent and dependent variables as mediating or moderating variables. Nielsen et al. (2017) and Preacher and Hayes (2008) mediation analyses were used to achieving this.

### Results / Findings

The study's findings are presented in this section, together with estimates of the direct, indirect, and cumulative impacts as well as descriptive statistics and correlations of the study variables employed.

### Descriptive Statistics and Correlation Analysis

The major construct of all the variables' composite means, standard deviations, and correlations are shown in Table 1. The entire construct's averages were calculated primarily to identify the variable with the greatest average value. To gauge how closely the data points matched the different means, their respective standard deviations were calculated. To ascertain the nature and direction of the link between the variables, a correlation analysis was conducted.

Table 1 shows that curriculum design (CD) positively correlates with Graduate Employability (GE) at a 1% significant level ( $CD=.611, p= 0.00$ ). Extra-curriculum (EC) and Work-Integrated Learning (WIL) are positively and significantly correlated with GE at 1% and significant levels respectively ( $EC=.667, p= 0.00$  and  $WIL= .510, p= 0.00$ ). Besides, the correlation coefficient between Student Engagement (SE) and Graduate Employability is positive and significant ( $SE=.680, p= 0.00$ ). On the part of Internship and Placement (IP) and GE, they all positively and statistically correlated ( $IP=.188, p= 0.00$ ). Essentially, University Collaboration with Industry (UCI) correlates significantly with Graduate Employability (GE) at ( $UCI = .667, p= 0.00$ ). Deducing from the Table 1, the research institutional variables indicated a high correlation with graduate employability.

**Table 1: Descriptive Statistics and Correlation Analysis**

|  | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8     |
|--|--------|--------|--------|--------|--------|--------|--------|-------|
| 1 Graduate Employability                     | 0.719  |        |        |        |        |        |        |       |
| 2 Curriculum Design                          | .611** | 0.716  |        |        |        |        |        |       |
| 3 Extra curriculum                           | .667** | .634** | 1      |        |        |        |        |       |
| 4 Work integrated learning                   | .510** | .615** | .554** | .808   |        |        |        |       |
| 5 Career development center                  | .641** | .683** | .626** | .686** | 0.742  |        |        |       |
| 6 University collaboration with the industry | .667** | .699** | .631** | .581** | .695** | 0.759  |        |       |
| 7 Student engagement                         | .680** | .655** | .667** | .650** | .655** | .717** | 0.719  |       |
| 8 Internship job placement                   | .188** | .579** | .684** | .567** | .572** | .521** | .583** | 0.721 |
| Mean   | 39.30  | 36.18  | 14.12  | 11.89  | 17.59  | 19.20  | 11.30  | 3.40  |
| Standard deviation                           | 14.95  | 12.97  | 4.41   | 4.39   | 8.02   | 8.92   | 5.68   | 1.36  |

\*\**. Correlation is significant at the 0.01; diagonals are the square roots of AVE*

### Measurement model

The primary parameters for the measurement model are shown in Table 2. The results show that the measuring model is effective. First, all of those items had individual reliability scores of greater than .5, as determined by the standardised loadings. Second, each construct's composite reliability was excellent (>.7). Additionally, these latent variables' convergent validity, as determined by the AVE, was greater than .5. Finally, as shown in Table 2, the constructs of the model are in fact different (discriminant validity). The square root of the AVE (the diagonal elements) is significantly greater than the correlations between the constructs (the off-diagonal elements).

Table 2. Measurement model: loadings, construct reliability and convergent validity

|                   | Loading | AVE   | $\sqrt{AVE}$ | Composite Reliability |
|-------------------|---------|-------|--------------|-----------------------|
| Curriculum Design |         | 0.547 | 0.740        | 0.923                 |
| CD1               | 0.645   |       |              |                       |
| CD2               | 0.709   |       |              |                       |
| CD3               | 0.692   |       |              |                       |

|  |       |       |       |       |
|--|-------|-------|-------|-------|
| CD4  | 0.727 |       |       |       |
| CD5  | 0.856 |       |       |       |
| CD6  | 0.655 |       |       |       |
| CD7  | 0.784 |       |       |       |
| CD8  | 0.716 |       |       |       |
| CD9  | 0.910 |       |       |       |
| CD10                                       | 0.653 |       |       |       |
| Extra curriculum                           |       | 0.512 | 0.716 | 0.891 |
| EC1  | 0.525 |       |       |       |
| EC2  | 0.843 |       |       |       |
| EC3  | 0.834 |       |       |       |
| EC4  | 0.849 |       |       |       |
| EC5  | 0.639 |       |       |       |
| EC6  | 0.549 |       |       |       |
| EC7  | 0.631 |       |       |       |
| EC8  | 0.765 |       |       |       |
| Work integrated learning                   |       | 0.653 | 0.808 | 0.948 |
| WIL1                                       | 0.765 |       |       |       |
| WIL2                                       | 0.800 |       |       |       |
| WIL3                                       | 0.915 |       |       |       |
| WIL4                                       | 0.680 |       |       |       |
| WIL5                                       | 0.731 |       |       |       |
| WIL6                                       | 0.860 |       |       |       |
| WIL7                                       | 0.704 |       |       |       |
| WIL8                                       | 0.927 |       |       |       |
| WIL9                                       | 0.847 |       |       |       |
| Career development center                  |       | 0.551 | 0.742 | 0.894 |
| CDC1                                       | 0.659 |       |       |       |
| CDC2                                       | 0.548 |       |       |       |
| CDC3                                       | 0.778 |       |       |       |
| CDC4                                       | 0.620 |       |       |       |
| CDC5                                       | 0.835 |       |       |       |
| CDC6                                       | 0.859 |       |       |       |
| CDC7                                       | 0.835 |       |       |       |
| University collaboration with the industry |       | 0.577 | 0.759 | 0.915 |
| UCI1                                       | 0.818 |       |       |       |
| UCI2                                       | 0.827 |       |       |       |
| UCI3                                       | 0.721 |       |       |       |
| UCI4                                       | 0.840 |       |       |       |
| UCI5                                       | 0.814 |       |       |       |
| UCI6                                       | 0.780 |       |       |       |
| UCI7                                       | 0.645 |       |       |       |
| UCI8                                       | 0.590 |       |       |       |
| Student engagement                         |       | 0.518 | 0.719 | 0.839 |



|                          |       |       |       |       |
|--------------------------|-------|-------|-------|-------|
| SE1                      | 0.546 |       |       |       |
| SE2                      | 0.802 |       |       |       |
| SE3                      | 0.841 |       |       |       |
| SE4                      | 0.753 |       |       |       |
| SE5                      | 0.609 |       |       |       |
| Internship job placement |       | 0.520 | 0.721 | 0.808 |
| IJP1                     | 0.585 |       |       |       |
| IJP2                     | 0.869 |       |       |       |
| IJP3                     | 0.608 |       |       |       |
| IJP4                     | 0.781 |       |       |       |
| Capital forms            |       | 0.515 | 0.718 | 0.839 |
| CF1                      | 0.764 |       |       |       |
| CF2                      | 0.767 |       |       |       |
| CF3                      | 0.837 |       |       |       |
| CF4                      | 0.596 |       |       |       |
| CF5                      | 0.590 |       |       |       |
| Graduate Employability   |       | 0.517 | 0.719 | 0.864 |
| GE1                      | 0.575 |       |       |       |
| GE2                      | 0.675 |       |       |       |
| GE3                      | 0.814 |       |       |       |
| GE4                      | 0.720 |       |       |       |
| GE5                      | 0.822 |       |       |       |
| GE6                      | 0.680 |       |       |       |

## Mediation Analysis

### Mediator-Developing networks and social relations

The study examines the mediation role of graduate capital forms (Developing networks and social relations) in relation to institutional strategies and graduate employability. It was first tested if there is a direct relationship between the mediator (developing networks and social relations) and graduate employability. The study found that there is a significant direct relationship between developing networks and social relations and graduate employability ( $\beta = 5.4309; p < 0.001$ ). This implies that developing networks and social relations has an influence on graduate employability.

Now it further assessed the indirect effects and the total effect of institutional strategies and graduate employability when “developing networks and social relations” is mediating. The results show that all the institutional strategies (Extra curriculum, work-integrated learning, Career Development Center, University collaboration with the industry, Student engagement, Internship job placement, and Curriculum Design) have a significant indirect relationship with graduate employability. This suggests that the relationship between institutional tactics and graduate employability is significantly mediated by “building networks and social relations.”. Now to assess if there is full or partial mediation, the researchers examined the total effect. The results from the total effect show that all the institutional strategies still exhibit a significant relationship with graduate employability. Since all the institutional strategies continue to show a significant relationship in the total effect, this implies that there is a

partial mediation role of "developing networks and social relations" in the relationship between institutional strategies and graduate employability.

### **Mediator- Developing the cultural capital of students**

Another mediator the study examined was "developing the cultural capital of students". From the direct relationship between the mediator (developing the cultural capital of students) and graduate employability, the results revealed that there is a significant direct relationship between the mediator "developing the cultural capital of students" and graduate employability ( $\beta = 0.8394; p < 0.01$ ). Therefore, the mediating role of "developing the cultural capital of students was assessed" through the indirect and the total effects. The results from the indirect effects show that all the institutional strategies have a significant indirect relationship with graduate employability. This implies that "developing the cultural capital of students" has a mediating role. The results from the total effects revealed that the mediating role is partial. This is because all the institutional strategies (Extra curriculum, work-integrated learning, Career Development Centre, University collaboration with the industry, student engagement, internship job placement, and curriculum design) continue to exhibit a significant total relationship with graduate employability. Therefore, the mediator (developing the cultural capital of students) does not completely impede the relationship between institutional strategies and graduate employability.

### **Mediator-Developing the psychological capital**

The study also examines the mediation role of "developing the psychological" in the relationship between institutional strategies and graduate employability. The direct relationship between the mediator (developing networks and social relations) and graduate employability was initially examined. According to the study, there is a strong direct link between psychological development and graduate employability. ( $\beta = 3.7146; p < 0.001$ ). This implies that developing psychological capital has an influence on graduate employability. The indirect effects and the total effect of institutional strategies and graduate employability when "developing psychological capital" is mediating. The results show that all the institutional strategies (Extra curriculum, work-integrated learning, Career Development Centre, University collaboration with the industry, student engagement, internship job placement, and curriculum design) have a significant indirect relationship with graduate employability. This demonstrates that "building psychological capital" mediates the association between institutional strategies and graduate employability to a large extent. The total effect was assessed in order to determine if there is full or partial mediation. The results from the total effect show that all the institutional strategies show a significant relationship with graduate employability. This implies that the mediator variable "developing psychological capital" does not completely offset the relationship between institutional strategies and graduate employability. Hence "developing psychological capital" plays a partial mediation role in the relationship between institutional strategies and graduate employability.

### **Mediator-Developing human capital**

The study also examines the mediation role of "human capital development" in the relationship between institutional strategies and graduate employability. The direct relationship between the mediator (human capital development) and graduate employability, when analysed, was insignificant

( $\beta = 0.2641; p = 0.2810$ ). This implies that human capital development will not portray any mediation role in assessing the relations between institutional strategies and graduate employability. The indirect effects confirm that there was no significant relationship between all the institutional strategies (Extra curriculum, work-integrated learning, Career Development Centre, University collaboration with the industry, student engagement, internship job placement, Curriculum Design) and graduate employability. According to this, there is no mediation role for "human capital development" in the connection between institutional initiatives and graduate employability.

### Mediator-Developing identity capital

The mediation role of "identity capital" in the relationship between institutional strategies and graduate employability was examined. The direct relationship between the mediator (identity capital) and graduate employability, when analysed, was insignificant ( $\beta = -0.0950; p = 0.6220$ ). This implies that capital identity has no relationship with graduate employability. This implies that capital identity will not have any mediation role in assessing the relationship between all the institutional strategies and graduate employability.

Therefore, "identity capital" has no mediating role in the relationship between institutional strategies and graduate employability.

### Mediator- Overall Graduate Capital Forms

The study also examines the mediation role of "Graduate Capital Forms" in the relationship between institutional strategies and graduate employability. The direct relationship between the mediator (Graduate Capital Forms) and graduate employability, when analysed, was insignificant ( $\beta = 0.0278; p = 0.5330$ ). This implies that Graduate Capital Forms will not portray any mediation role in assessing the relations between institutional strategies and graduate employability. The indirect effects confirm that there was no significant relationship between all the institutional strategies (Extra curriculum, work-integrated learning, Career development centre, University collaboration with the industry, student engagement, internship job placement, curriculum design) and graduate employability. This implies that "Graduate Capital Forms" has no mediating role in the relationship between institutional strategies and graduate employability.

|                          | Capital Forms |              |                   |                  |                     |              |
|--------------------------|---------------|--------------|-------------------|------------------|---------------------|--------------|
|                          | Social        | Culture      | Psychol<br>ogical | Human<br>capital | identity<br>capital | Overall      |
| <b>Total Effect</b>      |               |              |                   |                  |                     |              |
| Moderator                |               |              | -                 |                  |                     |              |
|                          | 5.431***      | 0.839**      | 3.715**<br>*      | 0.264            | -0.095              | 0.028        |
| Extra curriculum         | 0.457***      | 0.457**<br>* | 0.457**<br>*      | 0.457**<br>*     | 0.457**<br>*        | 0.457**<br>* |
| Work integrated learning | 0.111***      | 0.111**<br>* | 0.111**<br>*      | 0.111**<br>*     | 0.111**<br>*        | 0.111**<br>* |

|  |           |         |         |         |         |         |
|--|-----------|---------|---------|---------|---------|---------|
| Career development center                  | -0.172*** | -       | -       | -       | -       | -       |
|  |           | 0.172** | 0.172** | 0.172** | 0.172** | 0.172** |
|  |           | *       | *       | *       | *       | *       |
| University collaboration with the industry | 0.226***  | 0.226** | 0.226** | 0.226** | 0.226** | 0.226** |
|  |           | *       | *       | *       | *       | *       |
| Student engagement                         | 0.570***  | 0.570** | 0.570** | 0.570** | 0.570** | 0.570** |
|  |           | *       | *       | *       | *       | *       |
| Internship job placement                   | -1.703*** | -       | -       | -       | -       | -       |
|  |           | 1.703** | -1.703  | 1.703** | 1.703** | 1.703** |
|  |           | *       |         | *       | *       | *       |
| Curriculum Design                          | -0.076*** | -       | -       | -       | -       | -       |
|  |           | 0.076** | -0.076  | 0.076** | 0.076** | 0.076** |
|  |           | *       |         | *       | *       | *       |
| <b>Indirect Effect</b>                     |           |         |         |         |         |         |
| Extra curriculum                           | -0.054**  | -       | 0.240** | -0.008  | 0.002   | -0.005  |
|  |           | 0.031** | *       |         |         |         |
|  |           | *       |         |         |         |         |
| Work integrated learning                   | 0.581***  | 0.011** | 0.179** | 0.002   | -0.012  | 0.006   |
|  |           | *       | *       |         |         |         |
| Career development centre                  | -0.068*** | -       | -       | -0.009  | 0.002   | -0.003  |
|  |           | 0.019** | 0.047** |         |         |         |
|  |           | *       | *       |         |         |         |
| University collaboration with the industry | -0.160*** | 0.039** | -       | 0.000   | 0.003   | 0.001   |
|  |           | *       | 0.072** |         |         |         |
|  |           |         | *       |         |         |         |
| Student engagement                         | 0.229***  | 0.077** | -0.033  | 0.018   | -0.003  | 0.007   |
|  |           | *       |         |         |         |         |
| Internship job placement                   | 0.483***  | 0.022** | -       | 0.041   | -0.055  | 0.034   |
|  |           | *       | 1.309** |         |         |         |
|  |           |         | *       |         |         |         |
| Curriculum Design                          | -0.042*** | -       | -       | 0.004   | 0.002   | -0.001  |
|  |           | 0.008** | 0.011** |         |         |         |
|  |           | *       |         |         |         |         |
| <b>Direct Effect</b>                       |           |         |         |         |         |         |
| <b>Moderator</b>                           | 5.431***  | 0.839** | 3.715** | 0.264   | -0.095  | 0.028   |
|  |           | *       | *       |         |         |         |
| Extra curriculum                           | 0.511***  | 0.488** | 0.217** | 0.465** | 0.455** | 0.462** |
|  |           | *       | *       | *       | *       | *       |
| Work integrated learning                   | -0.471*** | 0.100** | -       | 0.108** | 0.122** | 0.105** |
|  |           | *       | 0.068** | *       | *       | *       |
|  |           |         | *       |         |         |         |
| Career development center                  | -0.104*** | -       | -       | -       | -       | -       |
|  |           | 0.153** | 0.125** | 0.162** | 0.174** | 0.169** |
|  |           | *       | *       | *       | *       | *       |

|  |           |                   |                   |                   |                   |                   |
|--|-----------|-------------------|-------------------|-------------------|-------------------|-------------------|
| University collaboration with the industry | 0.386***  | 0.187**<br>*      | 0.298**<br>*      | 0.226**<br>*      | 0.223**<br>*      | 0.225**<br>*      |
| Student engagement                         | 0.341***  | 0.492**<br>*      | 0.602**<br>*      | 0.552**<br>*      | 0.572**<br>*      | 0.562**<br>*      |
| Internship job placement                   | -2.186*** | -<br>1.725**<br>* | -<br>0.394**<br>* | -<br>1.744**<br>* | -<br>1.648**<br>* | -<br>1.737**<br>* |
| Curriculum Design                          | -0.034*** | -<br>0.069**<br>* | -<br>0.088**<br>* | -<br>0.080**<br>* | -<br>0.079**<br>* | -<br>0.076**<br>* |

## Discussions

The findings suggest the constructs identified under institutional strategies were strongly correlated with the development of graduate employability skills. The constructs are curriculum design, extra curriculum, work-integrated learning, career centers, university collaboration with industries, internship and job placement, and student engagement. The direct effects showed that all the institutional strategies had a relationship with graduate employability skills. These confirmed with literature that curriculum design, extra curriculum, work-integrated learning, career centers, university collaboration with industries, internship, and job placement, and student engagement improve graduates' employability (Hall, Pascoe, and Charity, 2017; Messum, Wilkes, Peters, and Jackson, 2017; Reddan, 2017).

The results show (social, cultural, and psychological capital) exhibit a partial mediation on institutional strategies and graduate employability. However, human and identity capital showed no mediation. This is not in line with Tomlinson (2017). He postulated that all the capital forms, namely human capital, social capital, cultural capital, psychological capital, and identity capital support employability development and that the different capitals are essential for graduate employability and it affects the labour market. For this study, social, cultural, and psychological show support for employability development.

According to Kang and Busser (2018), psychological capital can be developed by means of training. Universities, government agencies, and private enterprises could contribute to this improvement by working together to implement specific programmes that teach students assertive communication skills, how to adapt to change, how to better understand their strengths and weaknesses, and how to develop confidence in their own abilities. Although students are ultimately responsible for increasing their levels of social and psychological capital. On the other hand, Behle (2020), among others, has asserted that entrepreneurship teaching programmes can help students improve their entrepreneurial initiative. These programmes would teach students how to be creative, take initiative, and enhance their capital capacities (social, cultural, psychological, human, and identity capital).

## Conclusions

The study's findings confirmed earlier research that suggested social, cultural, and psychological capital contributed to graduate students' employability. Additionally, they provided evidence from earlier studies that demonstrated how these students' capital forms were influenced by employability competencies. However, the research indicates that the relationship between institutional strategies

and perceived employability development skills has no mediation with human and identity capital. In conclusion, graduate student capital forms and graduate employability grew because of all institutional measures, but not all capital forms have the same capacity to raise graduate employability. According to the findings, social, cultural, and psychological capital only have an impact on graduate job prospects. However, there were no consequences on human and identity capital.

### Limitations and Recommendations for future research

Research is usually limited by sample size, sample profile, methods of the data collection process, equipment, time of the study, financial resources, access to the literature review or theoretical background, and age of the data. The study was limited to only undergraduate business students' further research may investigate postgraduate students. This study was cross-sectional and therefore an evaluation of the initiatives was not done. It is therefore recommended that future studies should look at the effectiveness of the initiatives and measure them by comparing the data on students' progression, employment, and feedback from employers.

### Policy Recommendation

Based on the findings and conclusion the following recommendation was made:

1. Developing graduate employability skills would be a priority for universities if the Ghana. Tertiary Education Commission (GTEC) enforces the teaching of employability studies as a requirement in the curriculum design of all tertiary institutions.
2. There is the need for pragmatism to increase Government of Ghana intervention policies on employability and employment for graduates.
3. There is also the need for University rankings to incorporate graduate employability and employment outcomes in Ghana.
4. Government must support universities financially to develop employable graduates.
5. There is the need for universities to restructure their curricular that should gear towards entrepreneurial and employable skills related.

### CONFLICTS OF INTEREST

There are no conflicts to declare.

### REFERENCES

Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., & Ferreira-Oliveira, A. T. (2020).

Graduate employability and competence development in higher education-A systematic literature review using PRISMA. *Sustainability*, 12(15), 5900.

Artess, J., Mellors-Bourne, R., & Hooley, T. (2017). *Employability: A review of the literature 2012-2016*. York, England: Higher Education Academy.

Baah-Boateng, W. (2013). Determinants of unemployment in Ghana. *African Development Review*, 21(4), 385-399, Wiley Publications, ISSN: 1467-8268

Baah-Boateng, W. (2016). *Economic growth and employment generation nexus: Insight from Ghana* (Vol. 16). kassel university press GmbH.



- Bakari, H., & Khoso, I. (2017). Psychological determinants of graduate employability: A comparative study of business and agriculture students across Pakistan. *Business & Economic Review*, 9(4), 111-138.
- Behle, H. (2020). Students' and graduates' employability. A framework to classify and measure employability gain. *Policy reviews in higher education*, 4(1), 105-130.
- Bennett, D. (2019). Graduate employability and higher education: Past, present and future. *HERDSA Review of Higher Education*, 5, 31-61.
- Bridgstock, R. (2019). Employability and career development learning through social media: Exploring the potential of LinkedIn. In *Challenging future practice possibilities* (pp. 143-152). Brill.
- British Council (2015). Students' perception of employability and Inclusive Development: South Africa. Retrieved from
- Cheong, K. C., Hill, C., Fernandez-Chung, R., & Leong, Y. C. (2016). Employing the 'unemployable': employer perceptions of Malaysian graduates. *Studies in Higher Education*, 41(12), 2253-2270.
- Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes and context. *Studies in higher education*, 43(11), 1923-1937.
- Damoah, O. B. O., Peparah, A. A., & Brefo, K. O. (2021). Does higher education equip graduate students with the employability skills employers require? The perceptions of employers in Ghana. *Journal of Further and Higher Education*, 45(10), 1311-1324.
- Damoah, O. B. O., Peparah, A. A., & Brefo, K. O. (2021). Does higher education equip graduate students with the employability skills employers require? The perceptions of employers in Ghana. *Journal of Further and Higher Education*, 45(10), 1311-1324.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.
- Donald, W. E., Baruch, Y., & Ashleigh, M. (2019). The undergraduate self-perception of employability: Human capital, careers advice, and career ownership. *Studies in Higher Education*, 44(4), 599-614.
- Donald, W. E., Baruch, Y., & Ashleigh, M. J. (2019). Striving for sustainable graduate careers: Conceptualization via career ecosystems and the new psychological contract. *Career Development International*, 25(2), 90-110.
- Farenga, S. A., & Quinlan, K. M. (2016). Classifying university employability strategies: Three case studies and implications for practice and research. *Journal of Education and Work*, 29(7), 767-787.

- Fresnoza, E. P. (2021). *Reaching the Intersection of Indigenous and Modern: A Critical Analysis of Disaster Risk Management Modernization in Ivatan Indigenous Communities* (Doctoral dissertation, Royal Roads University (Canada)).
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12.
- Hanapi, Z., & Kamis, A. (2017). Analisis Perbandingan di Antara Industri, Pensyarah dan Graduan Terhadap Kepentingan Kemahiran Teknikal dan Kemahiran Employability yang Perlu dikuasai oleh Graduan Bidang Elektrik di Kolej Komuniti. *Sains Humanika*, 9(1-5).
- Harvey, L. (2002). Employability and diversity. Retrieved from [www2.wlv.ac.uk/webteam/confs/socdiv/sdd-harvey-0602.doc](http://www2.wlv.ac.uk/webteam/confs/socdiv/sdd-harvey-0602.doc).
- Hassan, N. F. B., Puteh, S. B., & Sanusi, A. B. M. (2018). Elements of technology enabled/enhanced active learning (TEAL) to enhance quality and employability of bachelor's students. In *MATEC Web of Conferences* (Vol. 150, p. 05005). EDP Sciences.
- Healy, M., Hammer, S., & McIlveen, P. (2022). Mapping graduate employability and career development in higher education research: A citation network analysis *Studies in Higher Education*, 47(4), 799-811.
- Holmes, L. (2017). Graduate employability: Future directions and debate. In *Graduate employability in context* (pp. 359-369). Palgrave Macmillan, London.
- Jackson, D. (2016). Modelling graduate skill transfer from university to the workplace. *Journal of Education and Work*, 29(2), 199-231.
- Jackson, D., & Dean, B. A. (2022). The contribution of different types of work-integrated learning to graduate employability. *Higher Education Research & Development*, 1-18.
- Jackson, D., & Tomlinson, M. (2022). The relative importance of work experience, extra-curricular and university-based activities on student employability. *Higher Education Research & Development*, 41(4), 1119-1135.
- Kinash, S., Crane, L., Judd, M. M., & Knight, C. (2016). Discrepant stakeholder perspectives on graduate employability strategies. *Higher education research & development*, 35(5), 951-967.
- Klees, S. J., Stromquist, N. P., Samoff, J., & Vally, S. (2019). The 2018 world development report on education: a critical analysis. *Development and Change*, 50(2), 603-620.
- Lok, J. (2019). Why (and how) institutional theory can be critical: Addressing the challenge to institutional theory's critical turn. *Journal of Management Inquiry*, 28(3),

335-349.

- Lomax, R. G. (2018). Structural equation modeling: Multisample covariance and mean structures. In *The reviewer's guide to quantitative methods in the social sciences* (pp. 457-466). Routledge.
- Mok, K. H., & Wu, A. M. (2016). Higher education, changing labour market, and social mobility in the era of massification in China. *Journal of Education and Work, 29*(1), 77-97.
- Monteiro, S., Almeida, L., Gomes, C., & Sinval, J. (2022). Employability profiles of higher education graduates: a person-oriented approach. *Studies in Higher Education, 47*(3), 499- 512.
- Nielsen, I., Newman, A., Smyth, R., Hirst, G., & Heilemann, B. (2017). The influence of instructor support, family support and psychological capital on the well-being of postgraduate students: a moderated mediation model. *Studies in Higher Education, 42*(11), 2099-2115.
- Peters, M. A., Jandrić, P., & Means, A. J. (Eds.). (2019). *Education and technological unemployment*. Springer..
- Pham, T., Tomlinson, M., & Thompson, C. (2019). Forms of capital and agency as mediations in negotiating employability of international graduate migrants. *Globalisation, Societies, and Education, 17*(3), 394-405.
- Preacher, K., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods, 40*(3), 879-891.
- Rock, D. (2019). Engineering value: The returns to technological talent and investments in artificial intelligence. *Available at SSRN 3427412*.
- Römgens, I., Scoupe, R., & Beusaert, S. (2020). Unraveling the concept of employability, bringing together research on employability in higher education and the workplace. *Studies in Higher Education, 45*(12), 2588-2603.
- Rowe, A. D., & Zegwaard, K. E. (2017). Developing graduate employability skills and attributes: Curriculum enhancement through work-integrated learning.
- Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students*.

- 4th ed, Prentice Hall Financial Times, Harlow.
- Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage publications
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Sin, C., Tavares, O., & Amaral, A. (2019). Accepting employability as a purpose of higher education? Academics' perceptions and practices. *Studies Higher Education, 44*(6), 920-931.
- Sin, C., & Neave, G. (2016). Employability deconstructed: perceptions of Bologna stakeholders. *Studies in higher education, 41*(8), 1447-1462.
- Smith, M., Bell, K., Bennett, D., & McAlpine, A. (2018). Employability in a global context: Evolving policy and practice in employability, work integrated learning, and career development learning.
- Suddaby, R. (2010). Challenges for institutional theory. *Journal of management inquiry, 19*(1), 14-20.
- Suleman, F. (2018). The employability skills of higher education graduates: insights into conceptual frameworks and methodological options. *Higher Education, 76*(2), 263-278.
- Teye-Kwadjo, E. (2021). The perceived social support for job search activity scale (PSS-JSAS): a psychometric evaluation in the context of Ghana. *Current Psychology, 1-9*.
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education+ Training*.
- Tran, T. T. (2019). Graduate employability: Beyond the skills agenda. In *Innovate Higher Education to Enhance Graduate Employability* (pp. 158-168). Routledge.
- van der Heijden, B. (2021). Is What's Past Prologue? A Review and Agenda for Contemporary Employability Research. *Is What's Past Prologue? A Review and Agenda for Contemporary Employability Research*.
- Walker, M., & Fongwa, S. (2017). Human development, capabilities, and graduate employability. In *Universities, employability and human development* (pp. 215-227). Palgrave Macmillan, London.

Weller, S. (2019). Academic practice: Developing as a professional in higher education. *Academic Practice*, 1-368.

Wilkins, S., & Huisman, J. (2012). The international branch campus as transnational strategy in higher education. *Higher education*, 64(5), 627-645.

Willmott, H. (2019). Can it? On expanding institutional theory by disarming critique. *Journal of Management Inquiry*, 28(3), 350-353.

Zhang, H. (2022). Structural equation modeling. In *Models and Methods for Management Science* (pp. 363-381). Springer, Singapore.



©The Author(s), 2023 **Open Access.** This article is distributed under the terms of the Creative Commons Attribution 4.01 International License (<https://creativecommons.org/licenses/by-nc/4.01>), which permits unrestricted use, distribution, and reproduction in any medium upon the work for non-commercial, provided the original work is properly cited.