



## BIROn - Birkbeck Institutional Research Online

Yawson, D.E. and Yamoah, Fred and Owusu Sarpong, F. and Abban-Ampiah, G. (2020) Inculcating employability skill sets in Undergraduates through employability embedded courses: students experience anatomisation. *Archives of Business Review* 8 (6), pp. 165-179. ISSN 2054-7404.

Downloaded from: <http://eprints.bbk.ac.uk/id/eprint/32396/>

*Usage Guidelines:*

Please refer to usage guidelines at <https://eprints.bbk.ac.uk/policies.html>  
contact [lib-eprints@bbk.ac.uk](mailto:lib-eprints@bbk.ac.uk).

or alternatively



# Inculcating Employability Skill Sets in Undergraduates Through Employability Embedded Courses: Students Experience Anatomisation

**Dr. David Eshun Yawson**

Business School, Ghana Institute of Management  
and Public Administration, Accra, Ghana.

**Dr. Fred Amofa Yamoah**

Dept. of Management, Birkbeck University of London,  
London, United Kingdom.

**Frederick Owusu Sarpong**

Business School, Ghana Institute of Management  
and Public Administration Accra, Ghana.

**Grace Abban-Ampiah**

Business School, Ghana Institute of Management  
and Public Administration Accra, Ghana.

## ABSTRACT

Embedding employability skill sets into management education is important yet the experience student stakeholder gains on employability embedded courses remains unclear. We examine undergraduate student experience of the learning outcomes of work-related employability course. The survey results suggest mode of delivery and problems encountered with the course content are factors that sum up their total experiences. The results also indicate a triad consisting of difficulty of the course content, student's work experience and satisfaction with the course content are strongly associated in determining students' experiences. We discuss the implications of these findings for employability embedded curriculum development theory and practice.

**Keywords:** Employability, Practitioners' forum, Career development, Undergraduate stakeholder experience, Curriculum development.

## INTRODUCTION

Increasing pressure to meet the expectations of stakeholders globally, has made Higher Education Institutions (HEIs) to embrace employability as a priority in the 21<sup>st</sup> Century (AdvanceHE, 2015). Thus, policies in higher education globally have shown an increasing preoccupation with employability (Qenani, MacDougall and Sexton, 2014). Tymon (2013) reports that employability has been identified as a key graduate outcome across multiple countries, and that industry and

government worldwide would welcome effective ways to address it in higher education. A more recent definition of employability by Dacre Pool and Sewell (2007, p. 280) is having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose, secure and retain occupations in which they can be satisfied and successful. The concept of graduate employability is embedded as providing the opportunities for students to develop knowledge, skills, experiences, behaviours, attributes, achievements and attitudes to enable graduates to make successful transitions and contributions, benefitting them, the economy and their communities (Cole and Tibby, 2013, Belgin Okay-Somerville, Scholarios, 2017, Pegg, Waldock, Hendy-Isaac and Lawton, 2012). The importance of this makes it relevant to all students at all levels of higher and further education.

Employers continue to report globally that graduates are not ready for the world of work, and lack some of the most basic skills needed for successful employment (AdvanceHE, 2017; Hooley, 2017). Literature abounds with research engaging these concerns from multiple stakeholders globally (Artess, Hooley, & Mellors-Bourne, 2017; AdvanceHE 2015; 2017; Harry, Chinyamurindi, & Mjoli, 2018). However, there is sparse research on interventions in HEIs on employability and their effectiveness in African countries. In countries where information is available, Tymon (2013), argues that the views of undergraduates, the recipients of the employability development, are not well known. This could be important, since learning theory tells us that motivation, learning styles and commitment of learners is an essential prerequisite for effective outcomes (Honey & Mumford, 1992). Indeed, concerns of students' expectations, perceptions, opinions, difficulties encountered, satisfaction and usefulness of these employability embedding courses are largely sparingly researched (Harry et al., 2018; Bamwesiga, 2013; Tymon 2013).

This paper contributes to the literature on employability by first, providing new evidence on student experience of employability embedding courses based on professional experiences. Secondly, to evidence the factors that condition student experiences of employability enhancement courses based on professional experience in a cohort programme at the beginning of their higher education studies. Finally, the paper examines these experiences and factors using single item variables as against multiple item variables. An added innovation, since some literature argues that single item variables, which are rarely in use in literature performs just as multi-item scales without the added cost of respondent fatigue and response biases (Bergkvist & Rossiter 2007; Nagy 2002, Wanous, Reichers, & Hudy, 1997). The rest of the paper is organized as follows; the review of the existing literature and salient research questions are presented. Then the method specifically the sample; procedure and the instrument used to gather evidence are elaborated upon. Finally, the empirical results are presented and discussed; and the paper concludes by highlighting its theoretical and practical implications; limitations of the research and future research.

## LITERATURE REVIEW

### Employability

The extant literature indicates that employability and employment are two different concepts (Römgens, Scoupe, and Beausaert, 2019; Artess et al., 2017; AdvanceHE, 2015; Yorke, 2010; Knight and Yorke, 2004). In higher education, employability has been linked to acquisition of skills for life (Dearing, 1997), knowledge, attitudes and mobility (Hillage and Pollard, 1998; Artess et al., 2017). The main definitions for graduate employability have evolved from that of Bowden, Hart, King, Trigwell, and Watts (2000, p. 1), and Knight and Yorke (2004, p. 3). Bowden et al (2000, p. 1)

defined employability as a set of graduate attributes; the qualities, skills and understandings a university community agrees its students would desirably develop during their time at the institution and, consequently, shape the contribution they are able to make to their profession and as a citizen. The Knight and Yorke definition is still widely quoted (Cole and Tibby, 2013) for employability as a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy (Yorke, 2006, p. 8). Dacre Pool and Sewell (2007, p. 280) redefined employability as having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose, secure and retain occupations in which they can be satisfied and successful.

Literature acknowledges that going through a degree programme does not necessarily make one employable (Paadi, 2014; York, 2006 ;2010). It also states that the complexity of employability and the variety that exists in curricula in higher education mean that no single, ideal, prescription for the embedding of employability can be provided (Eden, 2014; Hooley, 2017, Shah, Pell and Brooke, 2004; Knight and Yorke, 2003; 2004). And that the condition of local, national and international labour markets is a powerful determinant of graduates' employment success (Brown, Hesketh, and Williams, 2002). To embed employability in Higher Education, Knight and Yorke (2003) proposed the USEM model of employability, one of the best known and respected in the area of employability. However, Dacre Pool and Sewell (2007, p. 279) recounted that the USEM model has a weakness of not being easily accessible to non-experts in the field in explaining the concept of employability. They therefore proposed the CareerEDGE model of graduate employability. Cole and Tibby (2013) asserts that the CareerEDGE model is valuable in that it can be used to explain the concept of employability to those new to the subject, and to students and their parents as well as appealing to academics.

### **Employability Development Programmes**

Employability skills development have been undertaken through sector-wide and institution specific initiatives. This has led to a plethora of interest in awards recognising extra-curricular activities and achievements (Pegg et al.,2012). At the institution level, the context for practitioners is shaped by institutional curriculum, learning and teaching strategy and the responses, such as the employability statement made to the external environment. Employability skills are developed when employability is embedded in a whole curriculum through the learning, teaching and assessment methods in the curriculum structure (York and Knight, 2004). Thus, good learning and employability intentions need to be supported by learning, teaching and assessment approaches that are consistent with curricular intentions (Hill, Walkington and France, 2016).

Therefore, a plethora of programmes employ different pedagogical approaches to address the development of skills in career development learning; attributes to develop and communicate work and life experiences; degree subject knowledge and understanding; generic skills development; emotional intelligence; and other transferable skills. The pedagogical approaches are experiential learning, blended learning, face-to-face lectures, small group work, seminars and presentations (Eden, 2014.; Butcher, Smith, Kettle, and Burton, 2011). The courses in these programmes or schemes are assessed using personal development plans, written examinations; term reports; reflective reports; research reports; continuous assessments using quizzes and small group presentations.

### **The Context of the Research - The Practitioners Forum Course**

While acknowledging the strength of the Knight and Yorke (2003)'s USEM model, the Practitioners' Forum Course was innovated to be embedded in a curriculum using an extended Dacre Pool and Sewell (2007)'s CareerEDGE model of Graduate Employability in a business engagement for learning mode (AdvanceHE, 2017; Cole and Tibby, 2013) and delivered in a blended learning environment (Pegg et al., 2012 ). The design utilises industry-based presentations of extracurricular activity to embed enterprise and entrepreneurial skills into the curriculum (Buckley and Lee, 2018; Del Campo et al., 2016; Thompson et al. 2013; Keshmiri et al., 2020). The Practitioners' Forum Course is designed to offer professional development for students across all levels of the undergraduate programme (Pegg et al., 2012; Yorke 2010) to offer career development for students by learning from industry experts along all functional areas of business to interact and relate theory to practice, and understand the workings of organisations. The course was delivered through an electronic learning management system with video recordings from selected industry experts and the learnings in career development learning, experience, subject specific knowledge and skills, generic skills and emotional intelligence are evaluated in a reflective report at the end of the course (Cole and Tibby, 2013).The Practitioners' Forum Course can be considered to be based on the consensus theory as posited by Paadi (2014, p. 133). Consensus theory is defined in Selvadurai, Choy, and Maros (2012, p. 296) as a belief that human capital injection by way of instilling generic skills at tertiary level, will ensure employability of graduates and their eventual fast acceleration/leap frog in the corporate ladder. This research is based on two semester courses in the 2018/2019 academic year of the practitioners' forum course.

### **RESEARCH QUESTIONS**

This paper studies students' experiences of the employability embedding courses and the factors that conditioned the perceptions and experiences. The context of the study as discussed earlier is the Practitioners' Forum Course. Tymon (2013) observed that although some skills are more difficult to develop, there is agreement that skills can be trained or developed. However, personality which constitute personal attributes that characterise the unique nature of a person is still been contested as to the extent of it been inherited or developed. Woods and West (2010) argue that personality determine success, performance, and career choices, and its development is a slow and long-term process. Nevertheless, Rees, Godard, Fevre and Furlong (1997) have argued that students will not act as rational investors in education in their employability decision making, as this is affected by their experiences and individual identities (Harry et al., 2018; Thompson et al., 2013). Thus, effects of the undergraduate student's individualities such as their profile (age group, gender, campus of study, course of study), expectancy and experience (students' expectations, opinions, difficulties) and satisfaction and utility (satisfaction with course content, usefulness of the course to student's programmes) may condition student's perceptions and experience of the employability embedded course (Del Campo et al., 2016; Tymon, 2013). These relationships are however not well known and would be important for decision makers and stakeholders. We therefore, seek to examine how student identities condition their experiences of an employability embedded course. We expect that a high perceived utility of the course will enhance student's motivation in employability embedded courses and improve the orientation in their future employability decisions.

Hence our first research question states that:

**RQ1 – How do students perceive employability embedding courses based on professional experiences?**

Theorists such as Josselson (1987), Cross (1971), Helms (1993) and D’Augelli (1994) as cited in Coomes and DeBard (2004, p.6) elucidates the nexus of gender, race, sexual orientation and identity. Many factors have been thought to affect student’s perception of employability embedding activities (Harry et al., 2018; Little, 2005). This may include gender, age, work experience, student status, course of study, student expectations, course content, course delivery and accessibility, utility of the course (Artes et al., 2017; Idaka and Uzoechi, 2016; Paadi, 2014). Since, Santos (2019) in a small-scale qualitative study found that graduate employability is constrained by organizational and work-related boundaries; contextual and labour market boundaries; personal-related boundaries; and cognitive cultural boundaries.

Literature also reports of variations in career motivations and studying related to subject and age (Little, 2005). McDowell (1993) further states that on employability, there is evidence that some part-time students see explicit emphasis on skills development as a waste of time and resent having to demonstrate abilities they feel they use in every day work. Also, for these students’ time considerations affect how they explore and develop ideas and skills. Therefore, measuring the positive experiences by the perceived utility, opinion, difficulty and satisfaction of the course content and overall satisfaction we expect high values of these proxies as a way to validate employability embedded course. Thus, the second research question related to factors that may affect students’ experiences of employability embedding course is as follows:

**RQ2 -What are the factors affecting student’s experiences of employability embedding courses based on professional experiences?**

The answers to these research questions are important for lecturers, curriculum designers, career development and administrators of HEIs to identify the characteristics of students that influence learning in employability embedded curricular. Therefore, enabling them to tailor pedagogies suitable for students in the various age groups found in HEIs.

## METHOD

### Participants

The participants were drawn from a first-year undergraduate business school cohort of a leading tertiary institution in West Africa based in Accra, Ghana. The participants were engaged in a new employability embedded course named Practitioners’ Forum Course which is mandatory for all specializations in a new bachelors’ study programme launched by the business school in the 2018/2019 academic year. All the participants were admitted to the study programme having passed some basic entry requirements examination and were considered of the same caliber. The participants comprise of a student population of 267 students who registered for the first-year of the new bachelors’ programme of the Business School from two different campuses. with 24 from a satellite campus and 243 from the main campus. Out of this, 42 students registered for the Practitioners’ Forum I Course and 225 registered for the Practitioners’ Forum II Course. Of the 267 students which is made up of 156 (58.4%) females and 111 (41.6%) males, 262 made up of 42 from the Practitioners Forum I Course and 220 from the Practitioners Forum Course II submitted their surveys, out of which 250 responses were usable. The responses were provided voluntarily and ethical approval was met as per the Institute’s Ethics guidelines.

## **Procedure**

Students who took the courses at the end of the semester were administered with an electronic questionnaire as a Satisfaction Survey on another electronic platform, which made it clear it is not part of the course assignment to minimize lecturer's expectation on how many students are expected to respond. The research was explained to students through email and the purpose, the voluntary nature and anonymity issues made explicit on the first page of the survey instrument. Students' grades were also not part of this research. All analysis was done using SPSS 23 software.

## **Instrument**

The study instrument was derived from a larger survey for evaluating the learning on the learning management system. The survey instrument is made up of sections covering the personal information, learning experience and learning environment. The portion of the study instrument relevant for this study dealt with participant satisfaction under learning experience, which utilized a set of nine items on participants perceptions adapted from Del Campo, et al., (2016). In addition, there were items on gender, programme time, student status, work experience and age categorized into age groups.

The items from Del Campo, et al., (2016), ask for participants satisfaction of the Practitioners' Forum Course, initial expectation; the pros and cons of the course; the utility of the course; the difficulty of the content of the course; participants description of course; problems encountered with the course and overall satisfaction. We choose to measure them with Likert-type items on 7-point scales to ascertain the level of personal perceptions. Additionally, items on preferred method of delivery and an open-ended question on topics participants will prefer in the course were included.

The instrument included an item on gender since literature indicate gender differences in the age group characteristics (Idaka and Uzoechi, 2016; Cambiano, De Vore, and Harvey, 2001). Programme time which is the time students have their course of study, day and evening in the institute. This was added to elicit the differences between the time of programme and the status of the students, since most of the students termed as part-time / student workers have evening programme but there are other full -time students who also have evening programmes in the cohort under study (Little, 2005; McDowell, 1993). Items on work experience (McDowell, 1993) and Students' age groups were also included. The variables were grouped as categorical (Undergraduate Profile), categorical response (Expectancy and Experiential) and quantitative response variables (Satisfaction and Utility). It is worthy of note that these variables are single item variables which literature argues that single item variables, which are rarely in used in literature performs just as multi-item scales without the added cost of respondent fatigue and response biases (Bergkvist & Rossiter 2007; Nagy 2002, Wanous, Reichers, & Hudy, 1997).

## **Reliability and Validity**

The study adopted the use of single global formative items (Ellwart & Konradt, 2011; Bergkvist & Rossiter 2007) adapted from literature (Campo et al., 2016). Therefore, as with all single-item measures, no calculations of internal consistency could be computed. The only alternative methods for obtaining reliability data of single-item measures would be through the use of test-retest or equivalent-forms approaches (Nagy, 2002). However, both of these approaches would have required students to provide their names on the surveys, and therefore would have resulted in

violated confidentiality and may have damaged the credibility of the responses. As traditional measures of validity are not appropriate for formative constructs (Chin, 1998), the reliability and validity of the formative constructs were evaluated using critical literature review, pilot testing of instrument and experts' opinion.

## RESULTS AND DISCUSSION

### Sample Characteristics

From 267 participants there were 262 responses given a response rate of 98%. Out of this, a sample of 250 usable responses were realised. The sample consist of 60.8 % females and 39.2% males; 90.4% from the main campus and 9.4% from satellite campus; 41.6% Full-Time students and 58.4% Student Workers; 29.6% are in the day programme and 70.4% in the evening programme. The participants are from the Bachelor of Science (Honours) Business Administration programme with the following specializations: Procurement (14.8%); Project Management (9.2%); Tourism and Hospitality (10.4%); Accounting (7.2%); Administration (34.0%); Finance (6.4%); Human Resource (12.4%) and Marketing (5.6%). Also, 30.0% have no work experience; 6.4% have up to 1 year; 17.2% up to 2 years; 23.6% up to 5 years; 12.0% up to 10 years and 10.8% have more than 10 years. Concerning their ages, the sample consist of 31.6% of 16-23 years; 60.8% of 24-39 years; 7.6 % from 40-54 years.

Since the data came from two courses in the same academic year a homogeneity test was conducted on the quantitative variables. Results for the Mann-Whitney test (Hair, Black, Babin, and Anderson, 2010), at 0.05 significance level, reveal that for the set of variables, there were no systematic differences between the Practitioners Forum I and Practitioners Forum II survey results. Thus, we can analyse our responses as a homogeneous sample.

### Analysis

The data was analysed based on the three classifications of the variables as stated earlier in section 4.3. The first is the Undergraduate Profile factors which is made up of Campus of student, Gender, Age Group, Programme Time, Student Status, Course of Study and Student's Work Experience. The second category is Expectancy and Experiential Factors which is made up of Initial Expectation, Perception of the course, Problems encountered with course content, and Preference of mode of delivery (Mode of delivery). The third category is the Satisfaction and Utility Factors made up of Satisfaction with Course Content, Personal Opinion about the course, Usefulness of the course to study programme (Utility), Difficulty of the course content (Difficulty) and Rating of Total Satisfaction (Overall Satisfaction).

The descriptive characteristics of the satisfaction and utility factors were assessed since these variables were adapted from literature (Del Campo et al., 2016) and are single item formative variables. Normality in data is often a conventional assumption in the estimation process (Hair et al, 2010). Data distributions with either highly skewed nature or with high kurtosis are indicative of non-normality which has random effects on specification or estimation. Therefore, an attempt was made to assess the normality of the data. The satisfaction and utility factor items were assumed not to be normally distributed as they have skewness values ranging from -2.051 to -0.091 and kurtosis between +0.067 to +5.088 which fall out of the +2 to -2 range recommended for ordered categorical data (Hair et. al, 2010). We therefore proceed with analysis techniques that are robust for non-normal data.



### **Students' perceptions about an employability embedded course based on professional experience.**

Descriptive analysis of the Expectancy and Experiential Factors revealed for the initial student expectation of the course, 5.2 % reported that the course fell short of their initial expectation with 82% expectations met, 9.6% exceeding their expectation and 3.2% undecided. Generally, students have high expectations for employability embedding courses. On students' perception of the course, 38.8% reported "the contents are very practical for my study programme", 26.0% said "the contents make me know the usefulness of the theoretical concepts I receive from other courses in the study programme", 27.2% found it "very enjoyable and will like to have more throughout my study programme". 6.8% said "It is a course that just increases my study load without adding anything to my study programme" and a few 1.2% did not learn anything interesting. There is a general positive perception of employability embedding courses.

On the problems students encountered with the contents of the course, 22.8 % said "The contents are very complex", 4.8 % reported "The speakers did not explain the topics clearly", 13.6% held that "I do not have enough knowledge to understand the practitioners" forum course in its entirety ', and 58.8% reported "I did not find any problems with the practitioners' forum course." It is important to note that a sizable number of students (22.8%) found issues of employability skills development very complex and 13.6% did not have the prerequisite knowledge to understand them. With the preference of mode of delivery of the course, 27.6% did not prefer the mode of delivery of the course, 13.6% were undecided and majority 58.8% preferred the mode of delivery of the course. More than a quarter had issue engaging with the course on an electronic learning management system. This may be due to students' not familiar with having courses on these systems which are becoming the current mode of higher education learning environment. However, on the opportunity for students to provide topics to be included in the course the response was varied while a few (6.4%) did not have anything to add. The overwhelming majority (93.6%) provided varied answers which would have to be qualitatively analysed in another paper.

### **Factors that affect students' experiences of employability embedded course based on professional experience.**

To find the relationships within and between the factors that condition perceptions of students for an employability embedded course a nonlinear canonical correlation analysis (OVERALS) (Meulman and Heiser, 2011; Hair et al., 2010; Yazici, Ogus, Ankarali, and Gurbuz, 2010) was run for the three sets of variables the nominal categorical (Undergraduate Profile Factors), the nominal categorical response (Expectancy and Experiential Factors) and the ordinal quantitative response (Satisfaction and Utility Factors) variables. This is to elicit a broader view of the relationships and allowing for a more detailed presentation of the data structure (Grzeńkowiak, 2016; Muirhead and Waternaux, 1980). The purpose of nonlinear canonical correlation analysis is to determine how similar two or more sets of variables are to one another. This method of analysis establishes the similarity between the sets by simultaneously comparing linear combinations of the variables in each set with the aim to account for as much of the variance in the relationships among the sets as possible (Meulman and Heiser, 2011). We interpret the nonlinear canonical correlation analysis results from SPSS 23 software using, an evaluation of the fit and loss of measures (Table 1), the weights and the component loadings (Table 2); and a presentation of the biplot of the component loadings (Figure 1) allowing for the assessment of correlation among the variables (Grzeńkowiak, 2016; Thanoon, Adnan, and Saffari, 2015).

Loss values, Eigen values and fit values showing the relationship between the sets are shown in Table 1. The eigenvalues and the relationship described in each dimension where the maximum value for the eigenvalues is 1 and the minimum value is zero. The dimensional analysis revealed two dimensions of the data with eigenvalues of 0.665 and 0.582 respectively with a real value of the fitting as 1.247 (which represents the sum of eigenvalues calculated from the differences). The Eigenvalues were relatively high 0.665 and 0.582. We will therefore use the two-dimensional solutions and therefore  $1.247 / 2 = 62.35\%$  of the differences accounted for in the analysis. Also  $1.247 / 0.665$  from real data are calculated by fitting the first dimension and  $1.247 / 0.582$  of the corresponding real data are calculated by the second dimension. The table also shows loss values representing the difference rate in each dimension and in each set. The average rate of loss of the sets is 0.753, which need not be at a high level. Sum of loss rate and fitting must be equal to the number of dimensions in the study ( $1.247 + 0.753 = 2$ ). Thus, the loss values indicate how small or large are the multi-correlations between the total weighted variables with optimal scales and between dimensions.

**Table 1 Two- Dimensional Analysis Results**

Sets		Dimensions		Sum
		Dimension 1	Dimension 2	
Loss	Undergraduate Profile Factors	.486	.534	1.019
	Expectancy and Experiential Factors	.255	.343	.598
	Satisfaction and Utility Factors	.263	.379	.642
	Mean of Sets	.335	.418	.753
Eigenvalue		.665	.582	
Fit				1.247

An inspection of the component loadings and graphical representation reveal the second dimension separates the sets better, therefore we report the overalls outputs relating to this dimension in table 2 for weight, component loading and multiple fit.

The component loadings are equal to the Pearson correlation coefficient between the variables measured and the object scores. The component loadings also represent the coordinates of varying points on the chart and thus can be interpreted easily through graphical representation. The components loadings correspond to the weight. The weight is the regression coefficient in each for every quantified variable set. It provides an indication of the contribution each variable makes to the dimension within each set. A larger positive weight means that the variable is stronger in discriminating between the groups (in favour of the group above the y-axis). A negative value means that this variable is stronger in discriminating in favour of the group below the y-axis (Meulman & Heiser, 2011). The multiple fit measures the goodness of fit and is used to show the importance of the variable in discriminating between the groups. The largest values indicate the strongest discriminatory power overall.

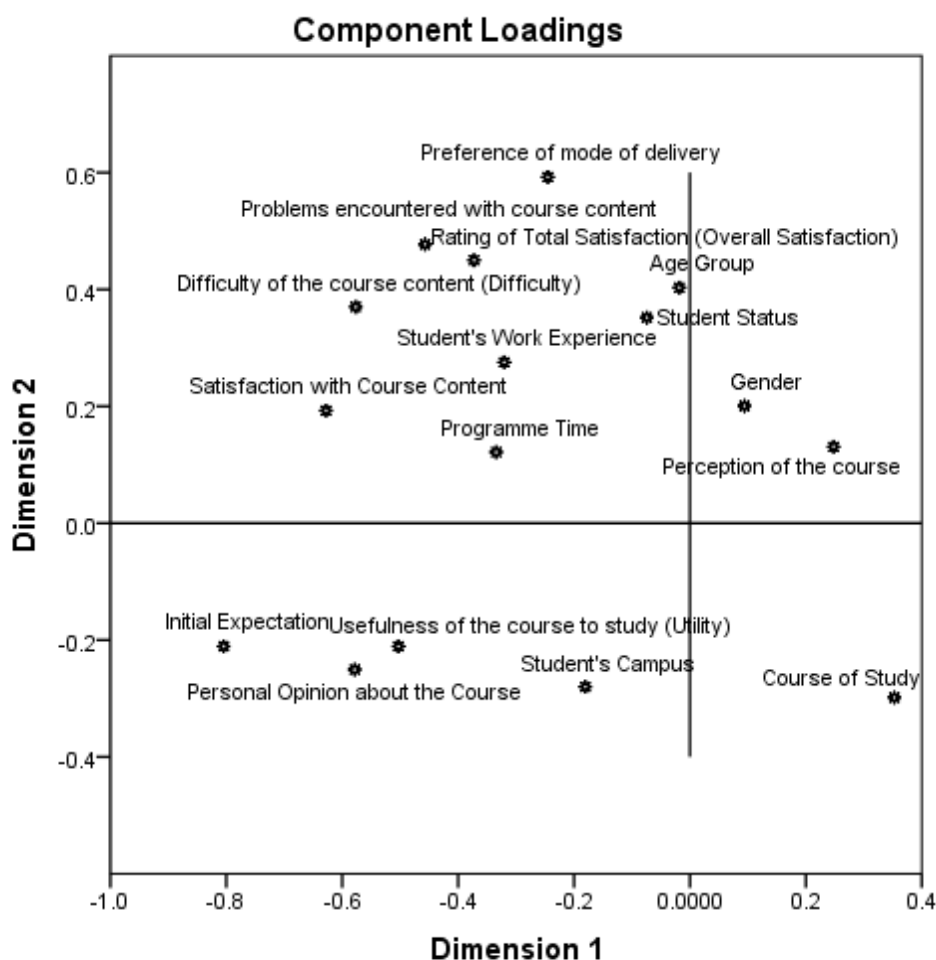
**Table 2: Overals Component Loadings**

Sets	Variables	Dimension 2		
		Weights	Loadings	Multi Fit
<b>Expectancy and Experiential Factors</b>	Preference of mode of delivery	0.589	.592	.347
<b>Satisfaction and Utility Factors</b>	Usefulness of the course to study	-0.582	-.211	.339
<b>Satisfaction and Utility Factors</b>	Rating of Total Satisfaction (Overall Satisfaction)	0.570	.450	.329
<b>Undergraduate Profile Factors</b>	Student's Campus	-0.444	-.280	.197
<b>Satisfaction and Utility Factors</b>	Difficulty of the course content	0.428	.370	.189
<b>Expectancy and Experiential Factors</b>	Problems encountered with course content	0.422	.477	.180
<b>Expectancy and Experiential Factors</b>	Initial Expectation	-0.405	-.211	.169
<b>Undergraduate Profile Factors</b>	Age Group	0.339	.403	.115
<b>Undergraduate Profile Factors</b>	Student Status	0.322	.352	.104
<b>Satisfaction and Utility Factors</b>	Personal Opinion about the Course	-0.275	-.251	.082
<b>Undergraduate Profile Factors</b>	Course of Study	-0.263	-.298	.080
<b>Undergraduate Profile Factors</b>	Programme Time	-0.254	.122	.065
<b>Expectancy and Experiential Factors</b>	Perception of the course	0.164	.131	.028
<b>Undergraduate Profile Factors</b>	Student's Work Experience	0.081	.275	.012
<b>Undergraduate Profile Factors</b>	Gender	0.110	.201	.012
<b>Satisfaction and Utility Factors</b>	Satisfaction with Course Content	0.076	.193	.011

From Table 2 the variables that discriminate/separate best between the three sets are verified by the values reported under multiple fit. The values of discriminating variables are in bold and the largest values indicate the strongest discriminatory power overall as predictor variables for conditioning perceptions of an employability embedded course. The results reveal that the variables that discriminate best between the three sets, in order of importance are: (1) Preference of mode of delivery; (2) Usefulness of the course to study; (3) Rating of Total Satisfaction (Overall Satisfaction); (4) Student's Campus; (5) Difficulty of the course content; (6) Problems encountered with course content; (7) Initial Expectation; and (8) Age groups. This implies that these variables are the most influential variables in relationships among variable sets for conditioning students' perceptions of an employability embedded course.

Figure 1 shows a biplot approximation of the correlations among the variables as conditioning the students' experience of an employability embedded course. The biplot clearly show the discriminating variables in Table 2 are positioned far away from the origin. However, the factors (1) Satisfaction with Course Content; (2) Gender and (3) Student's Work Experience are shown closer to the origin and therefore in order of least discriminatory power. This implies they are the least most influencing in relationships among all the variables conditioning students' experiences of an employability embedded course.

Furthermore, relationship among the variables conditioning the students' experiences of an employability embedded course can be observed from the biplot (Fig 1). The component loading above 0 on the y- axis indicate that students associate preference of mode of delivery and problems encountered with the course content to influence total satisfaction with employability embedded course. Also, students associate difficulty of the course content and student's work experience with satisfaction with the course content which has a relatively weaker discriminatory power. Gender also strongly associate with perception of the course (with the least discriminatory power). The component loading below 0 on the y-axis shows that student's initial expectation strongly associates with their personal opinion about the course to influence the student's experience of the usefulness of the employability embedded course to their course of study.



**Figure 1 Biplot for Variables Affecting Student Perceptions**

**CONCLUSIONS AND IMPLICATIONS FOR STAKEHOLDERS**

The study presents an innovative way of designing and delivering employability courses for undergraduate business students in employability embedded programmes which is very relevant to the current drive of higher education courses to be delivered via the internet. Thus, testing in practice and evaluating the courses through this research. The findings of the research provide lessons for the development, improvement and replication of the courses. We therefore found in our study that students have high expectations, positive perceptions and experiences, high positive

personal opinions; high utility of the course to their programme of study and high overall satisfaction with the employability embedding course. This is also, shown by the enthusiasm and overwhelming majority suggesting varying topics they want to learn about in the course. However, there is a need for programme implementers and stakeholders to intensify education on employability in general, since a sizable percent of students found issues of employability skills development very complex to deal with and some suggest that they do not have the prerequisite knowledge to understand them. There is therefore the need to employ a simple model of graduate employability in the development of undergraduate employability embedding programme models. Also, a quarter of the sample had issues engaging with the course on an electronic learning management system. Therefore, bringing to the fore the issue of the technology application, framework and pedagogy for embedding employability to programme implementers. In determining the relationships of these factors and how they affect students' experiences of an employability embedding course, we determine that students associate preference of mode of delivery and problems encountered with the course content to influence total satisfaction with employability embedded course. Also, students associate difficulty of the course content and student's work experience with satisfaction with the course content. Gender also strongly associate with perception of the course. Generally, satisfaction with course content, gender and student's work experience are least influential. Also, student's initial expectation strongly associates with their personal opinion about the course to influence the student's perception of the usefulness of the employability embedded course to their course of study.

These interesting findings provide important contributions for lecturers, curriculum designers, career development and administrators of HEIs to input into strategies of graduate employability programmes which will enhance student learning and experience. It is important for stakeholders to orient students about employability embedding course since students' satisfaction with course content, personal opinions about the course, usefulness of the course to study programme, difficulty of course content and rating of total satisfaction were generally different across student's initial expectations. Also, perceptions proved to be important, as students' perceptions of usefulness of the course to the study programme, difficulty of the course content and rating of total satisfaction were significantly different across students' perception of the course. As with any course, especially where there is the involvement of technology, the ability to resolve problems encountered by students with supporting activity is very important. This is the case when students' perceptions of usefulness of the course to study programme, difficulty of the course content and rating of Total satisfaction were significantly different across problems encountered with the course content and preference of mode of delivery of the course. These findings provide important contributions for lecturers, curriculum designers, career development and administrative staff of HEIs to input into strategies of graduate employability programmes which will enhance student learning and experience.

### **LIMITATIONS AND FURTHER RESEARCH**

The limitation of the paper is the inability to completely control for lecturer expectation on how many students would join or what the gender breakdown might be to complete the questionnaire which could only be minimised in the research design. Another limitation of the study is the sample was drawn from two campuses of one tertiary institution, which may influence the responses and therefore the generalisability of the findings. The paper also provides an opportunity for future research, which could examine the generality of the results and especially a study on employability

programmes in the age groups found in the current graduate programmes. These may be done through a bigger sample and a longitudinal study could also provide evidence on the changing patterns over time.

## References

- AdvanceHE (2015). Frameworks for embedding employability in Higher Education. Retrieved May 31, 2019, from <https://www.heacademy.ac.uk/system/files/downloads/embedding-employability-in-he.pdf>
- AdvanceHE (2017). Business engagement for learning Retrieved June 3, 2019, from <https://www.heacademy.ac.uk/knowledge-hub/business-engagement-learning-0>
- Artess, J., Hooley, T., and Mellors-Bourne, R. (2017). Employability: A review of the Literature 2012–2016. York: Higher Education Academy. Retrieved June 4, 2019, from : [https://www.heacademy.ac.uk/system/files/resources/employability\\_a\\_review\\_of\\_the\\_literature.pdf](https://www.heacademy.ac.uk/system/files/resources/employability_a_review_of_the_literature.pdf)
- Bamwesiga P. M. (2013). A conceptual understanding of employability: The employers' view in Rwanda. *Journal of Adult and Continuing Education*, 19: (1) Spring. Retrieved from <http://dx.doi.org/10.7227/JACE.19.1.4>
- Belgin Okay-Somerville and Scholarios D. (2017) Position, possession or process? Understanding objective and subjective employability during university-to-work transitions, *Studies in Higher Education*, 42:7, 1275-1291, DOI: 10.1080/03075079.2015.1091813
- Bergkvist, L. and Rossiter, J. R. (2007) The Predictive Validity of Multiple-Item Versus Single-Item Measures of the Same Constructs. *Journal of Marketing Research*. Vol. XLIV (May):175-184.
- Bowden, J., Hart, G., King, B., Trigwell, K. and Watts, O. (2000). Generic capabilities of ATN university graduates. Retrieved August 10, 2019 from: <http://pandora.nla.gov.au/pan/34352/20030513-0000/www.clt.uts.edu.au/ATN.grad.cap.project.index.html>
- Brown, P., Hesketh, A. and Williams, S. (2002). Employability in a knowledge-driven economy. In Knight, P. (compiler) Notes from the 13th June 2002 'Skills plus' conference, Innovation in education for employability held at Manchester Metropolitan University. Retrieved from [www.cardiff.ac.uk/schoolsanddivisions/academicschools/socsi/publications/workingpaperseries/numeric21-30.html](http://www.cardiff.ac.uk/schoolsanddivisions/academicschools/socsi/publications/workingpaperseries/numeric21-30.html)
- Buckley, P., and Lee, P. (2018). The impact of extra-curricular activity on the student experience. *Active Learning in Higher Education*. <https://doi.org/10.1177/1469787418808988>
- Butcher, V. Smith, J., Kettle J., & Burton, L., (2011) Review of good practice in employability and enterprise development by Centres for Excellence in Teaching and Learning. A report for HEFCE. Higher Education Academy. York.
- Cambiano, R.L., De Vore J. B. and Harvey, R.L. (2001). Learning Style Preferences of the Cohorts: Generation X, Baby Boomers, and the Silent Generation. *PAACE Journal of Lifelong Learning*, 10, 31-39.
- Cole D. and Tibby, M. (2013) Defining and developing your approach to employability; A framework for higher education institutions. AHE. Retrieved May 31, 2019, from [https://www.heacademy.ac.uk/system/files/resources/employability\\_framework.pdf](https://www.heacademy.ac.uk/system/files/resources/employability_framework.pdf)
- Coomes, M.D. and DeBard, R. (2004). A generational approach to understanding students. *New Directions for Student Services*, 106, 5-16.
- Dacre Pool, L. and Sewell, P. (2007). The key to employability: developing a practical model for graduate employability. *Education & Training*. 49 (4), 277-289.
- Dearing, R. (1997). Higher Education in the Learning Society. Report of the National Committee of Enquiry into Higher Education. London: HMSO.
- Del Campo, C., Navallas, B. and Camacho-Miñano, M.M (2016) The benefits of providing contact with practitioners in round table forums: Undergraduate student perception of the experience, *The International Journal of Management Education*, 14 (3), 263-272. Retrieved from <https://doi.org/10.1016/j.ijme.2016.05.006>.

Eden, S. (2014). Out of the comfort zone: enhancing work-based learning about employability through student reflection on work placements. *Journal of Geography in Higher Education*, 38 (2), 266–76.

Grześkowiak, A. (2016). Satisfaction with chosen aspects of life in Poland - evaluation by canonical correlation methods. *International Journal of Social Sciences*, 5 (1), 60-71.

Hair, J. F. Jr., Black, W. C., Babin, B. J. and Anderson, R. E. (2010), *Multivariate Data Analysis (7th Edition)*, Pearson Education, Upper Saddle River, NJ: Prentice Hall.

Harry, T., Chinyamurindi, W.T., and Mjoli, T. (2018). Perceptions of factors that affect employability amongst a sample of final-year students at a rural South African university. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 44(0), a1510. Retrieved from <https://doi.org/10.4102/sajip.v44i0.1510>

Hill, J. Walkington . H. & France, D. (2016) Graduate attributes: implications for higher education practice and policy, *Journal of Geography in Higher Education*, 40:2, 155-163, DOI: 10.1080/03098265.2016.1154932

Hillage, J. and Pollard, E. (1998) *Employability: developing a framework for policy analysis*. Research Brief No. 85. London: Department for Education and Employment.

Holmes, L.. (2013) Competing perspectives on graduate employability: possession, position or process?, *Studies in Higher Education*, 38:4, 538-554, DOI: 10.1080/03075079.2011.587140

Honey P., & Mumford A. (1992). *The Manual of Learning Styles* (3rd ed.). Maidenhead, Berkshire, UK., Peter Honey.

Hooley, T. (2017). Climbing the employability mountain. *Graduate Market Trends*, Spring, 10–11.

Idaka, I.E. & Uzoechi, L.I. (2016). Gender, age and employability skills acquisition among university students in Imo state, Nigeria. *International Journal of Innovative Education Research*, 4(4), 6-15.

Idaka, I.E. and Uzoechi, L.I. (2016). Gender, age and employability skills acquisition among university students in Imo state, Nigeria. *International Journal of Innovative Education Research*, 4(4), 6-15.

Keshmiri, F., Jafaric, M., Dehghanc, M., Raee-Ezzabadic A., and Ghelmanic, Y. (2020) The effectiveness of interprofessional education on interprofessional collaborative practice and self-efficacy. *Innovations In Education And Teaching International* DOI:10.1080/14703297.2020.1763827

Knight, P. and Yorke, M. (2003) *Assessment, Learning and Employability*. London: Society for Research into Higher Education and Open University Press.

Knight, P. and Yorke, M. (2004) *Learning, Curriculum and Employability in Higher Education*. London: Routledge Falmer.

Little, B. (2005) *Part-time students and employability*. Learning and Employability, Series Two. York: HEA. Retrieved June 4, 2019 from [http://www.heacademy.ac.uk/resources/detail/employability/part-time\\_students\\_and\\_employability](http://www.heacademy.ac.uk/resources/detail/employability/part-time_students_and_employability).

McCowan, T., Walker, M., Fongwa, S., Oanda, I., Sifuna, D., Adedeji, S., Oyebade, S., Ananga, E. D., Adzahlie-Mensah, V. and Tamanja, E. (2016) *Universities, Employability And Inclusive Development: Repositioning Higher Education In Ghana, Kenya, Nigeria And South Africa*. British Council: Universities, Employability and Inclusive Development project (2013–16), Retrieved August 30, 2019 from : [https://www.britishcouncil.org.gh/sites/default/files/universities\\_employability\\_and\\_inclusive\\_development.pdf](https://www.britishcouncil.org.gh/sites/default/files/universities_employability_and_inclusive_development.pdf)

McDowell, L. (1993). Enterprise education and part-time students. *Assessment and Evaluation in Higher Education* 18 (3), 187–204.

Meulman, J.J. and Heiser, W.J. (2011). Nonlinear canonical correlation analysis, IBM, SPSS, Categories 20.

Muirhead, R., and Waternaux, C. (1980). Asymptotic Distributions in Canonical Correlation Analysis and Other Multivariate Procedures for Nonnormal Populations. *Biometrika*, 67(1), 31-43.

Nagy, M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, 75, 77–86.

O’Leary, S. (2019). Gender and management implications from clearer signposting of employability attributes developed across graduate disciplines, *Studies in Higher Education*, DOI: 10.1080/03075079.2019.1640669

- Paadi, K. (2014). Perceptions on employability skills necessary to enhance Human Resource Management graduates' prospects of securing a relevant place in the labour market. *European Scientific Journal (Special Edition)*, 129–143. Retrieved from <https://eujournal.org/index.php/esj/article/view/4016>
- Pegg, A., Waldock, J., Hendy-Isaac, S. and Lawton, R. (2012) *Pedagogy for Employability*. York,UK: HEA. Retrieved August 9,2019 from: [https://www.heacademy.ac.uk/system/files/pedagogy\\_for\\_employability\\_update\\_2012.pdf](https://www.heacademy.ac.uk/system/files/pedagogy_for_employability_update_2012.pdf)
- Qenani, E., MacDougall, N., and Sexton, C. (2014). An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment. *Active Learning in Higher Education*, 15(3), 199–213. <https://doi.org/10.1177/1469787414544875>
- Rees, G., Godard, S., Fevre, R., and Furlong, J. (1997). History, place and the learning society: towards a sociology of lifetime learning. *Journal of Education Policy*,12(6), 485-497.
- Römgens, I., Scoupe, R., and Beausaert, S. (2019). Unraveling the concept of employability, bringing together research on employability in higher education and the workplace, *Studies in Higher Education*, DOI: 10.1080/03075079.2019.1623770
- Santos, G.G. (2019): Career boundaries and employability perceptions: an exploratory study with graduates, *Studies in Higher Education*, DOI:10.1080/03075079.2019.1620720
- Selvadurai, S.,Choy E. A. and Maros, M. (2012). Generic Skills of Prospective Graduates from the Employers' Perspectives, *Asian Social Science*; 8, (12)
- Shah, A, Pell, K. and Brooke, P. (2004) Beyond First Destinations: Graduate Employability Survey. *Active Learning in Higher Education*, 5(1), 9–26.
- Thanoon, T.Y., Adnan, R. and Saffari, S.E. (2015). Generalized nonlinear canonical correlation analysis with ordered categorical and dichotomous data. *Jurnal Teknologi (Science and Engineering)*, 75 (1), 91-99.
- Thompson, L. J., Clark, G., Walker, M., and Whyatt, J. D. (2013). 'It's just like an extra string to your bow': Exploring higher education students' perceptions and experiences of extracurricular activity and employability. *Active Learning in Higher Education*, 14(2), 135–147. <https://doi.org/10.1177/1469787413481129>
- Tisdell, E. J., Strohschen, G. I. E., Carver, M. L., Corrigan, P., Nash, J., Nelson, M., Royer, M., Strom-Mackey, R., and O'Connor, M. (2004). Cohort Learning Online in Graduate Higher Education: Constructing Knowledge in Cyber Community. *Educational Technology & Society*, 7 (1), 115-127.
- Tymon, A (2013) The student perspective on employability, *Studies in Higher Education*, 38:6, 841-856, DOI: 10.1080/03075079.2011.604408
- Wanous, J., Reichers, A. E., & Hudy, M. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247–252.
- Williams, S., Dodd, L.J., Steele, C. and Randall, R. (2015) A systematic review of current understandings of employability. *Journal of Education and Work*, 29 (8) 877-901.
- Woods, S., and M. West. (2010). *The psychology of work and organizations*. Andover: Cengage.
- Yazici, A.C., Oğus, E., Ankarali, H., and Gurbuz, F., (2010) An application of nonlinear canonical correlation analysis on medical data. *Turkish Journal of Medical Science* 40, 503–510. Retrieved July 16, 2019 from <https://dergipark.org.tr/download/article-file/128818>
- Yorke, M. & Knight, P.T. (2004), *Embedding Employability into the Curriculum*, Higher Education Academy, York.
- Yorke, M. (2006) *Employability in higher education: what it is – what it is not*. Learning and Employability Series One. York: ESECT and HEA. Retrieved June 1, 2019 from <https://www.heacademy.ac.uk/knowledge-hub/employability-higher-education-what-it-what-it-not>
- Yorke, M. (2010) Employability: aligning the message, the medium and academic values. *Journal of Teaching and Learning for Graduate Employability*. 1 (1), 2-12. Retrieved August 31, 2019 from: <https://ojs.deakin.edu.au/index.php/jtlge/article/download/545/539>