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**A MODEL OF EMPLOYABILITY FOR
PART-TIME LEARNERS IN
HIGHER EDUCATION:
ANTECEDENTS AND OUTCOMES**

Dawn Whitton

DBA

2019

**A MODEL OF EMPLOYABILITY FOR
PART-TIME LEARNERS IN
HIGHER EDUCATION:
ANTECEDENTS AND OUTCOMES**

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BSc (Hons), MBA, FHEA, MRICS

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ABSTRACT

Graduate employability has generated interest within both the academic and business context as well as the wider economy and government policy. Tomlinson (2017) claims that the interest in the subject area of graduate employability has escalated since the start of this century due to the strengthening of the relationship between higher education (HE) and the economy. The context and potential impact of graduate employability is evidently far-reaching and consequently there is a plurality of literature, which attempts to conceptualise the factors and dimensions of graduate employability. However, this is predominantly focussed on full-time students with very little empirical research relating to part-time students despite the contribution such learners can make to the economy (Bennion, Scesa and Williams, 2011).

This thesis therefore seeks to bridge a gap in the conceptualisations of employability and offers an empirically tested model of employability for part-time students. This has been undertaken through adopting a positivist research philosophy and quantitative research methodology. Data collection comprised the distribution of a questionnaire to part-time students studying at three HEIs from which 369 responses were received. The data from this was analysed through exploratory factor analysis (EFA) to reduce the number of variables and create a revised questionnaire and conceptual model of employability for part-time students. The second phase of the study comprised the distribution of the revised questionnaire to empirically test the conceptual model. This was undertaken by means of confirmatory factor analysis (CFA) and structural equation modelling (SEM) to examine and test the posited model through hypotheses testing. The research therefore offers an empirically tested model of employability for part-time learners, which will further contribute to existing conceptualisations of employability. The model identifies five key dimensions for career enhancement being: ambition, determination, confidence, commitment and knowledge and networks which are presented in the '*Career Enhancement Model of Employability for part-time students*' (CEME). A validated measurement tool and empirically tested model is the final outcome of this research which makes a contribution to both knowledge and professional practice.

Keywords: Employability, Part-time students, Career enhancement, Career readiness

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GLOSSARY

AVE	Average Variance Extracted
CBI	Confederation of British Industry
CEME	Career Enhancement Model of Employability for Part-time Students
CFA	Confirmatory Factor Analysis
DLHE	Destination of Leavers from Higher Education
EFA	Exploratory Factor Analysis
EHE	Enterprise in Higher Education
HE	Higher Education
HEA	Higher Education Academy
HEFCE	Higher Education Funding Council for England
HEIs	Higher Education Institutions
HEP	Higher Education Providers
HESA	Higher Education Statistics Agency
KMO	Kaiser-Meyer-Olkin
KPIs	Key Performance Indicators
PCA	Principal Component Analysis
SEM	Structural Equation Modelling
WP	Widening Participation

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“The wisest mind has something yet to learn” George Santayana

DECLARATION

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the Faculty Ethics Committee on 11 January 2017.

I declare that the Word Count of this Thesis is 61531 words (excluding tables)

Name: Dawn Whitton

Signature:

Date: 18/05/20

CHAPTER ONE

Introduction to the Thesis

1.0 Chapter Overview

The overarching aim of this study is to investigate the antecedents of employability to determine how such conceptualisations can be utilised to develop a model of employability for part-time students. The purpose of this chapter is therefore to present the scope of the study and expand on the overall rationale and motivation for the research. In order to frame the overall aim of the study and research objectives, the research context is explained. This includes identifying gaps in existing research, which are aligned to the contribution to both existing knowledge and professional practice.

Reference to the term ‘*antecedents*’ within the context of this study relates to the quantitative research methodology which has been adopted. An antecedent in the context of the models to be presented in this thesis is a construct that explains either on its own or in combination or addition to other constructs the behaviour of another (subsequent) construct. Constructs are therefore central to the study and are of key interest.

A breakdown of the chapters concludes Chapter 1 in order to provide a clear framework and structure for this study.

1.1 Background to the study

This study primarily focuses on graduate employability but within the context of part-time students. As indicated by Callender (2011), whilst there is no clear definition for what constitutes part-time study or being a part-time student, the Higher Education Statistics Agency (HESA) (nd) suggest part-time students are those learners that do not fit within the definition of a full-time student. HESA (nd) define full-time students as:

“Those normally required to attend an institution for periods amounting to at least 24 weeks within the year of programme of study, on thick or thin sandwich courses and

those on a study related year out of their institution. During that time students are normally expected to undertake periods of study, tuition or work experience which amount to an average of at least 21 hours per week”.

For the purpose of this study, all part-time students are included, both undergraduate and postgraduate who are enrolled on both part-time taught and distance learning programmes of study. The rationale for this is to provide an inclusive model which is viable for all part-time students.

The provision of part-time programmes creates a potential challenge for higher education (HE) providers when considering the development of employability frameworks and strategies to enhance the employability of all graduates. Given the diverse nature of students and programmes of study, it is possible to overlook part-time students perhaps due to the assumption that they are already working. Their employability needs are arguably overshadowed by this misconception. Academics and higher education institutions (HEIs) might also focus strategies and curriculum development on the basis of the higher number of students studying full-time compared with the number enrolled on part-time programmes, as evidenced in data produced by Higher Education Statistics Agency (HESA) (nd). Studies by both Bennion, Scesa and Williams (2011) and Butcher (2015) acknowledge the number of part-time students has continued to decline and constraints of financial support could be a significant contributory factor in this reduction. However, as further recognised by Bennion *et al.* (2011, p. 149) part-time study has the potential to make a powerful contribution to the UK economy, particularly those who are already working and looking to improve their *“higher-level skills by broadening learning opportunities beyond traditional full-time modes of study”*. Given the importance of part-time study, particularly in terms widening participation and social mobility (Delaney and Farren, 2016) and the contribution to the UK economy (BIS, 2009), the academic curriculum should be developed to support part-time students with opportunities to enhance their career readiness and employability.

A number of factors influence the decision to study part-time with each student having their own motivations to study. Whist this potentially includes career

development linked to diversifying within an existing or new career, it could also relate to entry to the labour market for the unemployed (McQuaid, Green and Danson, 2005). Not all students have the option to study full-time due to personal commitments or circumstances and part-time study might be the only option as it offers more flexibility in terms of an approach and is thereby essential (Butcher and Rose Adams, 2015). HEIs therefore need to consider the diverse needs and expectations of part-time students when developing the curriculum and this includes giving due consideration to an employability model to support such development.

Through a systematic literature review, Williams, Dodd, Steele and Randall (2016) consider the dimensions of employability and its association with the terms capital and career management along with the overall context relative to labour market demand. Reference to both capital and career management is found in extant employability literature and studies such as Yorke and Knight (2007), Dacre Pool and Sewell, (2007) and Bridgstock's (2009) Career Management model. This thesis evaluates the antecedents of both capital and career management within the context of part-time students. The outcome of the research is the development of a model of employability intended to inform HE frameworks to support part-time students as they negotiate their academic journey and career readiness.

Developed from a conceptual model constructed from Stage 1 of the data collection and analysis, a model of employability for part-time students was empirically tested during Stage 2. The aim of the model is to offer a further perspective to current approaches to employability and a framework for HE providers to consider when reviewing strategies for enhancing employability for part-time students. The objective of this study is to broaden the thinking on current conceptualisations which target full-time students and offer a more inclusive model for both undergraduate and postgraduate part-time students.

Existing conceptualisations and models of employability are therefore evaluated first to frame the overall context and significance of graduate employability. Following on from this, the research study will evaluate the relevance of such conceptualisations

for part-time students through a quantitative research methodology and the development of a conceptual model. The final part of the study empirically tests the posited model which contributes to professional practice in terms of developing a greater understanding of the requirements for part-time learners to enhance their career readiness and employability.

1.1.1 Introducing the Term Employability

Employability is not easy to define with numerous definitions offered in extant literature. Yorke and Knight (2007, p. 158) interpret employability to be:

“A graduate’s (or other awardee’s) suitability for appropriate employment. It is quite different from actually getting an appropriate job, which is dependent on factors such as the state of the economy and patterns of discrimination in the labour market”.

A key word within this statement is “*suitability*” which excludes external forces such as the economy and is instead focussed on the characteristics of the graduate and what they can offer to a prospective employer particularly in terms of their knowledge, skills and attributes. Further to this, suitability arguably relates to the graduate’s desire to secure a suitable job, which in some instances relates to their degree and qualifications. Yorke and Knight (2007) link this to a study by Linke (1991) and Yorke (2004) in terms of what does and does not constitute employability. Vanhercke, De Cuyper and Peeters (2014, p. 592) break down the term employability to “*employment*” and “*ability*” and relate this to the “*ability to be employed*”. McQuaid *et al.* (2005, p. 192) suggest two differing perspectives and questions if “*employability relates primarily to an individual’s readiness for work or whether it relates more broadly to the factors influencing whether an individual can get relevant work*” and hence links to issues in terms of supply and demand.

One of the most commonly cited definitions of employability (Holmes, 2013a; Andrews and Higson, 2010; Harvey, 2010 and Dacre Pool and Sewell, 2007) is that put forward by Yorke (2006 p. 8) who suggests it is:

“A set of achievements, skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations”.

Studies by Bridgstock (2009) and Baker and Henson (2010) also refer to the conceptualisations of employability and the associated development of lists of skills and attributes connected to the definition by Yorke (2006). Cashian, Clarke and Richardson (2015) however recognise two different perceptions with the Yorke definition potentially adding further confusion within the employability debate. Firstly, the skills and attributes which graduates acquire to be *“more likely to gain employment”* and secondly, reference to the term *“be successful”* within their actual career. Based on this argument, employability is not just about the ability of a student to secure a position but it is also the ability to develop within their role. This relates to earlier research by Hillage and Pollard (1998, p. 24) who linked employability to the *“capability to gain initial employment, maintain employment and obtain new employment if required”*. This statement is particularly relevant for part-time students who are perhaps already employed and not looking to gain employment but could be seeking to enhance or change their career. Arguably a number of part-time students may have studied previously and have an undergraduate degree but need to achieve a higher level qualification such as a masters in order to progress further in their career or seek alternative employment. Part-time study whether at undergraduate or postgraduate level therefore provides an opportunity to study to suit the needs and motivation of the learner. This links to the rationale for the inclusion of both undergraduate and postgraduate students within this study to ensure the findings capture both modes of study and the development of a model which is both inclusive and valid.

The motivation for study whether at undergraduate or postgraduate level adds a further dimension to the employability debate as identified by Kember *et al.* (2001). The authors preferred to adopt the term *“orientation”* instead of *“motivation”* or *“reason”* for enrolling when analysing data to determine why students choose to study part-time. The findings included links to re-training for a career change along with continuing professional development, an alternative to full-time education and a

second chance for others who may not have had a previous opportunity (Kember *et al.*, 2001). The motivations and orientations to study are expanded on further both in section 1.2.2 below and the literature review.

A further debate surrounding employability is related to the perspectives associated with graduate identity. A study by Cashian *et al.* (2015) questioned if it is time to move on the employability debate and if there should there be greater focus on graduate identity as opposed to lists of pre-defined skills and attributes. Holmes (2001, 2013b and 2015) and Hinchliffe and Jolly (2011) suggest graduate identity is key to employability as it is not just possessional in terms of acquisition of skills and attributes from a predefined list but also the positional and processual aspects of graduate employability. A positional approach relates to social positioning based on education and processual is associated with identity which is relational in terms of how an individual sees themselves and how they are perceived by others in terms of the gatekeepers to employment (Holmes, 2013b). The positional and processual approach is potentially a key motivational factor for part-time students who may already be employed but could be looking to position themselves and progress within their existing organisation or a new role and is again aligned with orientations and motivations to study. This also links to theories surrounding perceived employability and protean careers, which is a further dimension within the employability discourse (Williams *et al.*, 2016).

Whilst many studies consider employability in terms of the first destination after graduation and the initial acquisition of employment, employability is also considered in terms of life-long learning and upskilling (Knight and Yorke, 2002). Defining employability is therefore not straightforward as suggested by Williams *et al.* (2016, p. 1), who state “*theories of employability have become increasingly complex and multi-dimensional*” and combined with the context from which it is viewed, the perspective can vary widely. Cashian *et al.* (2015) acknowledges the differing perspectives of employability but also questions what it means for part-time students who are already in work. Whilst there has been a decline in part-time student numbers in recent years (HESA, nd), part-time students still represent a growing group, particularly due to the introduction of degree apprenticeships. Aligned to

widening participation initiatives, part-time study is also associated with social mobility and is significant for economic growth (Callender, 2011). Callender and Feldman (2010) claim there is a gap in research in terms of the overall experiences of part-time students. The purpose of this study is therefore to consider an element of this gap in terms of the student experience and association with the conceptualisations of employability.

The focus of much of the literature surrounding employability does however appear to align to the theories of gaining employment. This again links to one of the underlining aims of this study to determine how part-time students who may actually already be employed relate to the conceptualisations of employability. A part-time student could be studying to further their career or seek alternative employment. A part-time student could, however, also be unemployed and seeking to obtain either an undergraduate or postgraduate degree with the aim of entering the labour market but are not in a position to undertake a full-time programme of study. Arguably, part-time learners have more complex and differing motivations for study compared with their full-time counterparts (Bennion *et al.*, 2011). The motivations for study are perhaps more complex for part-time students compared with their full-time students and HEIs therefore need to ensure the differing motivations and orientations are understood in order to convey programmes which meet with the expectations of all stakeholders.

This study therefore argues that HEIs need to reconsider their pedagogical approaches and identify opportunities to enhance employability for part-time students. It is evident from a review of extant literature that there is a multitude of perspectives, conceptualisations and models to evaluate the concepts of employability and Chapter 2 explores this further. Pertinent to this however is the need to understand the significance of why employability is of such interest particularly within the context of HE.

1.1.2 The Significance of Employability for the HE Curriculum

The Dearing Report in 1997 called for HE providers to enhance the employability skills of graduates through the curriculum to meet the needs of the economy (Tomlinson, 2017). The subsequent Leitch Report (2006, p. 1) expanded further on this in terms of skills development and what “*long term ambitions*” the UK should have to “*maximise economic prosperity, productivity and to improve social justice*”. Leitch (2006, p. 2) acknowledged that whilst we have expanded our provision of HE which is essential for a “*highly skilled economy*”, we are still lagging behind other countries such as France and Germany in terms of technical and intermediate skills. Leitch (2006, p. 2) suggests skills are an “*important lever within our control to create wealth and to reduce social deprivation*”. This links to human capital theory which suggests HE improves productivity and the income of graduates versus non graduates (Pericles Rospiglios, Greener, Bournier and Sheehan, 2014). HE is therefore an avenue to develop skills, knowledge and attributes and forms part of the employability debate. Leitch (2006), has previously called for both employers and individuals to be aware of the need to develop a learning culture. In order to respond to the expansion of a learning culture, the design and development of programmes by HEIs create opportunities to develop technical and intermediate skills.

The Higher Education Funding Council (HEFCE), (BIS, 2011, p. 5) acknowledges the significance and claimed benefits of graduate employability and the role of HEIs and suggest:

“Embedding employability into the core of higher education will continue to be a key priority of Government, universities and colleges, and employers. This will bring significant private and public benefit, demonstrating higher education’s broader role in contributing to economic growth as well as its vital role in social and cultural development”.

It is also of value to students and graduates as stakeholders not only in enhancing their employability but also due to the derived benefit in terms of their “*general well-*

being and future prospects” as claimed by Pericles Rospigliosi, Bourner and Heath (2016, p. 186).

Published annually, statistics relating to graduate employability based on the Destination of Leavers from Higher Education (DLHE) survey capture the destination of students within six months of graduating. The data from this survey contributes to the institutional performance indicators in terms of league tables and Key Performance Indicators (KPIs) (HEFCE, 2016). Unistats also include the statistics as part of the Key Information Set (KIS) (HEFCE, 2016) and potentially such data could be an influencing factor for stakeholders and their decision making when choosing a HE provider and programme of study. Pericles Rospigliosi *et al.* (2016, p. 186) also recognise graduate employability as a performance indicator as it affects the status of a university along with funding implications and the “*ability to recruit the students they want*”. Whilst statistics from the DLHE indicate the destination of leavers, Cole and Tibby (2013) suggest that this is not a measure of employability but is instead a measure of employment. There is a difference in the two terms and it has been argued employment as a performance indicator is not about securing any employment but graduates should be able to seek and secure a graduate-level job (Knight and Yorke, 2003). This is therefore a potential weakness in the use of such statistics in terms of considering if the UK is meeting its objective to have a highly skilled workforce. However, for HEIs it is a key element in terms of demonstrating the number of graduates employed within six months of graduating and assists as a marketing tool when recruiting new students.

The construct of employability also links to the wider economy in terms of its contribution to both economic growth and competitiveness (Poon, Hoxley and Fuchs, 2011). In addition, at both regional and local levels, “*employability has been the foundation of many labour market policies*” (McQuaid *et al.*, 2005 p. 191). HE is linked to this as recognised by Cai (2013, p. 457) who states, “*One of the basic functions of education is to cultivate people to meet the needs of the labour market*”. HEIs therefore offer a critical link in contributing to the wider economy through developing employability within the curriculum.

To facilitate HEIs in the development of the academic curriculum and employability strategies, the HEA have designed a flexible framework to assist in the creation of a “*cohesive and more comprehensive approach to employability*” (Cole and Tibby 2013, p. 10). The framework invites HE providers to position their employability agendas. Of particular interest to this study, the framework acknowledges that such agendas do not just relate to full-time students but extends to all students regardless of the mode of study (Cole and Tibby 2013). The framework identifies and discusses further a number of employability models and these form part of the literature review in Chapter 2 of this thesis.

1.1.3 Employability and Widening Participation

Layer (2004, p. 3) identified that since the 1997 election there had been greater focus on widening access to HE but acknowledged “*the social class divide within the sector as a whole remains, with higher education perceived as being the province of the professional classes with relatively little participation from lower-socio-economic groups*”. The Government set a target to raise participation rates for students between the ages 18 to 30 from 41% to 50% by 2010 (Layer, 2004). However, as emphasised by Layer (2004, p. 3), the objective should not be about participation rates but HEIs also need to consider progression and the employability of widening participation (WP) applicants, hence to ensure “*greater social cohesion*”, we need to consider the whole experience.

Heaslip, Board, Duckworth, and Thomas (2017) define WP as a means of promoting both social mobility and equality from underrepresented groups and is of international interest. The authors acknowledge that WP extends to “*mature or second chance learner, students with disabilities, students from black or ethnic minority groups and from lower socio-economic backgrounds*” (2017, p. 66). Of more significance is the acknowledgement of HEFCE (2013) that WP is not just about initial entry to HE. It extends further in terms of being successful in HE which relates to “*completion, attainment and progression to employment and/or post graduate study*” and as such a graduate will arguably improve their job security, financial well-being along with both their mental and physical health (Heaslip *et al.*, 2017 p. 67).

As part of the Learning and Employability Series 1 and 2 published by the HEA in 2007, Thomas and Jones (2007) highlight the need to consider employability and student diversity. The authors acknowledge the barriers some students face in terms of employability and the reluctance of some employers to provide opportunities for under-represented groups. Therefore, whilst part-time study provides an opportunity for students from under-represented groups to combine academic development whilst working, other part-time students may not be working and will be engaging in HE to access the labour market or change careers. WP is therefore not just about initial entry to HE and as identified by Thomas and Jones (2007) it is not just about increasing the number of students either. The emphasis should be on ensuring such students are supported to be successful in both their academic journey and career goals.

Widening participation is linked to part-time students whose circumstances and surroundings place them at a disadvantage (Williams and Kane, 2010). Opportunities to study in HE increases social mobility and aligns with improving social status and resulting financial stability (Heaslip *et al.*, 2017). This is not only beneficial to the individual but also the economy through up-skilling the workforce (Bennion *et al.*, 2011). However, Callender and Feldman (2009) recognise that part-time education is not without its complexities due to the segmented and diverse nature. This diversity not only links to the demographics of such learners but also differing modes of study combined with motivations for study. Defining a part-time learner is therefore complex.

1.2 Defining the Part-time Learner

1.2.1. Contribution of Part-time Learners to the Economy

Callender (2011) acknowledges the contributions part-time students can offer to economic growth and development of skills and how these link to HE policies driven by Government objectives to improve the skills of the UK workforce. The contribution that part-time students make to the perceived skills shortage is also explained by Maguire (2013, p. 2) who suggests:

“Part-time education, whether at undergraduate or post-graduate level is an extremely important element in higher education in this country”. It has been attributed to *“widening participation, offering opportunities to people who may have made wrong choices at an earlier stage, and it is an essential element in developing the nation’s skills base”*.

However, as identified by Callender (2011), the benefit of part-time study also has personal and social benefits due to the sense of improved well-being. The views of Maguire (2013) and Callender (2011) demonstrate the importance of part-time modes of study and as such reinforces the need to consider employability from the perspective of such learners. The view of Maguire (2013) is that to develop the skills base of the nation involves acknowledging the importance of part-time education at both undergraduate and postgraduate level. This supports the rationale to include both levels of study within this thesis to ensure the proposed model is inclusive of all part-time students. This includes those who may have an undergraduate degree but perhaps made a wrong choice and are undertaking further study to change career path and have opted to study a postgraduate degree on a part-time basis.

The importance of part-time study to both the individual learner and the wider economy are acknowledged, and as such, HE providers need to ensure that the curriculum and employability strategies are sufficiently developed to facilitate the career development of such learners. This is particularly pertinent given the recent introduction of degree apprenticeships which offer an alternative to full-time education and provides an alternative route to study part-time both at undergraduate and postgraduate level. This is further justification for the inclusion of both undergraduate and postgraduate students within this thesis to ensure the model is fully inclusive for all students undertaking a degree apprenticeship regardless of whether this a first degree at undergraduate level or a postgraduate degree. The design of the curriculum for degree apprenticeships is influenced by the requirements of the employers and professional bodies. Whilst an apprenticeship will offer employment, HE providers need to be mindful that some apprentices could seek alternative employment at the end of their training and education. This adds further support for this study to consider a model for the career enhancement for part-time

students already working but seeking progression or change of employment. Hence as universities continue to develop support systems and career centres for their students, consideration also needs to be given to the diverse nature of part-time students. Earlier research by BIS (2009) recognised potential differences between full and part-time learners and called for flexible study to enable part-time study to be “*organised around work, reducing student support costs, building practical employability skills and fostering links between students and their employers*”. BIS (2009) further emphasise that universities need to consider the provisions for part-time students and these should not be seen as “*something to be bolted on to a core model of full-time teaching*”. Based on the contribution part-time learners make to both the economy and society, this acts as a further justification for this particular study and the development of a model which is relevant for all part-time students regardless of mode or level of study.

Cashian (2015, p. 109) identifies that the subject area of employability had resulted in “*a plethora of research papers, funded projects and policy documents involving university academics, Government bodies, professional body organisations and careers organisations*”. Cashian (2015) links the interest in employability to key performance indicators whereby statistics relating to the number of students within employment are recorded in DLHE data. HEIs therefore need to develop strategies to improve performance with the DHLE survey. Part-time students also form part of such surveys and could therefore potentially skew statistics relative to this.

Regardless of this, it is evident that existing strategies which consider employability tend to primarily focus on full-time programmes of study and part-time students are generally absorbed within such frameworks and models. Given the potential contribution that part-time students can make to the existing labour market and skills shortage, an employability model for their needs would provide greater insight and support pedagogical practices to be adapted to support their learning and career development and flexible ways to learn. This view is shared by McLinden (2013, p. 6) who on behalf of HEA suggests “*HE providers, therefore, have to explore new ways to meeting the needs of increasingly diverse learners as they seek to position themselves in a changing educational landscape that is increasingly student driven and market led*”. The contribution of a model of employability for part-time students

will therefore provide a valuable tool for consideration when designing and developing programmes of study for part-time students.

1.2.2 The Part-time Learner’s Motivational Factors to Study

Much of the research surrounding employability leans towards the skills and attributes approach and in particular, what it means for full-time undergraduate students (Holmes, 2013a; Andrews and Higson 2008a; Harvey, 2010 and Dacre Pool and Sewell, 2007). Cashian *et al.* (2015, p. 7) question, albeit briefly, what employability means for part-time students who are generally already within a place of work and suggest, “*Little work has been done on understanding the specific needs and aspirations of part time students who are already in work*”. The motivational factors to study are therefore an important consideration to determine the key drivers for studying. Swain and Hammond (2011, p. 599) offer a view on this and suggest the motivations to study “*are inextricably linked to students’ identities – who they think they are and who they think they may become*”. The authors identified thirteen motivations but acknowledged that these fell within two sub groups being either intrinsic or extrinsic motivations. Extrinsic motivation is associated with value and reward whereas intrinsic motivation relates to enjoyment or interest (Swain and Hammond, 2011). Figure 1.1 details the extrinsic motivations for studying as identified by the authors.

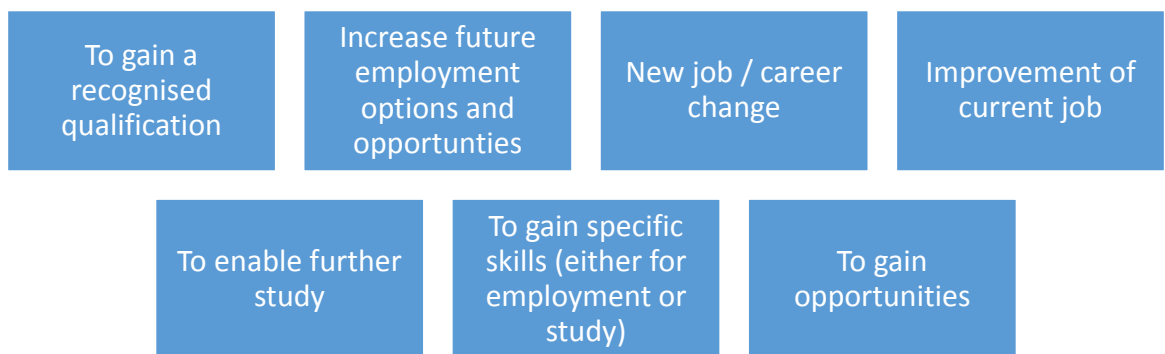


Figure 1.1 Extrinsic motivations based on the findings from Swain & Hammond, (2011).

The extrinsic motivations demonstrate the value that a part-time student places on the need or desire to engage with studying for career enhancement or further study which

supports the justification that HE providers need to be mindful of ensuring employability strategies and the academic curriculum supports such students.

Figure 1.2 captures the intrinsic motivations determined within the same study and exemplifies that part-time students can have very different motivations to study, including enjoyment and self-esteem.



Figure 1.2 Intrinsic motivations based on the findings from Swain & Hammond (2011).

The study by Swain and Hammond (2011) also links to the work of Bennion *et al.* (2011, p. 147) and the acknowledgement that some part-time students are studying “*to change job or career; move into paid employment; to remain active in retirement; or as a requirement of employment*”. The learner could therefore be extrinsically motivated in terms of developing their career and employment opportunities or intrinsically motivated and study purely for enjoyment. Swain and Hammond (2011) also found that students can have a combination of overlapping motivations. A part-time student could therefore study to gain a qualification but are intrinsically motivated because they are seeking a qualification to prove to themselves and others that they can do it. This adds a further complexity for HEIs where employability frameworks and strategies will not have the same significance for those undertaking study for pleasure such as those in retirement.

The focus of the study by Swain and Hammond (2011) was however, based on mature part-time students and this is therefore a potential limitation of the study as not all part-time students are mature. School leavers undertaking a degree apprenticeship will potentially have more extrinsic motivations to study compared with someone who has reached retirement and has more intrinsic motivations. For the purposes of this thesis therefore, the study is focussed primarily on extrinsic motivations to study as identified in the study by Swain and Hammond (2011) in order to design and develop a model of employability for those part-time students seeking career enhancement. This extends to WP initiatives and providing an opportunity for students to study part-time to better themselves and enhance their employability.

1.3 Part-time Students and Learner Numbers

When evaluating extant employability literature, the primary focus appears to be on full-time students. The justification for this is likely to be based on there being significantly more full-time students than part-time as identified in recent statistics published by HESA (2017). Bennion *et al.* (2011) identify that part-time programmes are a common form of study in Australia, Canada, New Zealand and the USA whereas numbers in the UK have declined. In 2015/16 for UK domiciled students, there were 1,172,855 full-time, first-degree students compared with just 169,915 part-time students. This does not include Open University (OU) students who are generally classed as “*other undergraduate*” students as identified in earlier research by Little (2005). Therefore, if taking OU students into account, the number of part-time students will be higher although still significantly less than full-time students. In addition to the gap in numbers between mode of study, again based on data presented by HESA (2017) between 2011/12 and 2015/16, the number of students studying part-time have declined by 7% as detailed in Figure 1.3 below:

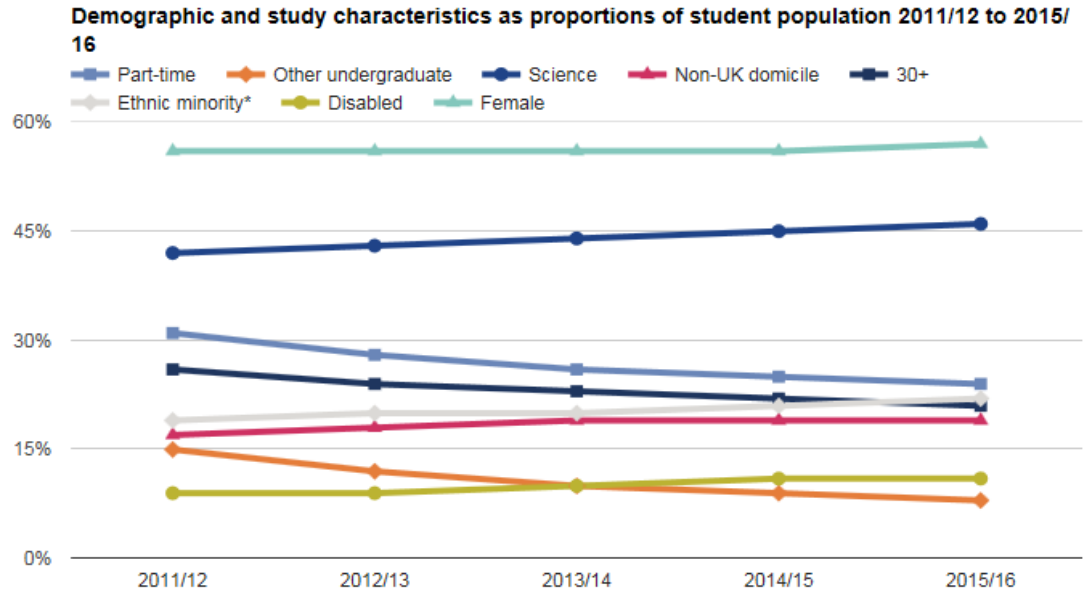


Figure 1.3 (HESA, 2017)

It is therefore justified to perhaps place a greater emphasis on employability for full-time students given the number of graduates who will be seeking employment is significantly higher than part-time students, and arguably a number of the part-time students will already be within employment. However, the importance of part-time students is recognised both nationally and internationally particularly in terms of WP and access to HE. Callender (2011, p. 469) identifies that:

“Part-time study is central to lifelong learning. It plays a significant role in broadening access to HE and creating greater social mobility both of which enhance social justice. In 2007/8 nearly two out of every five undergraduates at an English Higher Education Institution (HEI) just under half a million students studied part-time”.

In a later study by Callender and Little (2015, p. 250) part-time study is recognised as being an important aspect of *“meeting wider government objectives for higher education (HE) and for sustainable economic growth through skills development”*. However, despite the recognition of the value of part-time study in terms of WP initiatives and the benefits to society and government policies, the number of students

studying part-time has continued to decline as evidenced in the statistics provided by HESA.

A review of the challenges faced by part-time students undertaken by Butcher (2015) for the Higher Education Academy (HEA), identifies that the decline in the number of part-time students links to financial support being reduced and austerity measures impacting on the availability of support from employers. Such factors combined with the increase in tuition fees, has resulted in an overall decline in the number of UK part-time degree level learners (Butcher, 2015). However, due to the recent introduction of degree apprenticeships in 2015 and subsequent launch in 2017, the number of part-time students will increase as employers look to use the apprenticeship levy to develop both new talent and its existing workforce. As identified by UCAS (nd.) *“Degree apprenticeships combine working with studying part-time at University”* and the mode of study being delivered via study blocks or day release, the format of which is determined by the programme and in conjunction with the employer.

Powell and Walsh (2017, p. 1) recognise the introduction of the degree apprenticeships to be a change to the HE landscape and vocational training and refer to the increased criticism of the more traditional approaches to HE due to its ineffectiveness in *“preparing students for future employment, and for its lack of responsiveness to employee needs”*. Employers will therefore have an input into the design of the curriculum (Powell and Walsh, 2017), and arguably, some of the criticisms of students and graduates not being work ready should be resolved. In addition, the financial implications which could discourage someone entering HE could be reduced and encourage WP and social mobility as the employer will be responsible for meeting the cost of tuition fees (Powell and Walsh, 2017). The introduction of degree apprenticeships and greater employer involvement further supports the need to develop a model of employability, which considers part-time students to ensure pedagogical practices support such learners in their development. Again, as degree apprenticeships are offered for undergraduate study and at master’s level, this provides further justification for the development of a model of employability for all part-time students regardless of mode or level of study.

1.4 Research Objectives

The overarching aim of this study is to design and offer a research instrument which has been empirically tested to determine a model of employability for part-time students seeking career enhancement. The antecedents and models of employability are therefore examined and evaluated to explore their significance in preparing part-time students in terms of their current and future careers. In order to design a model of employability for part-time students, the relevant factors and dimensions of employability were first examined based on the following research objective:

Identify and empirically assess the antecedents of employability that enhance the employment and career readiness of part-time students

Objectives

The following secondary research objectives will be undertaken in order to evaluate the overall aim and research question.

- **RO1** Evaluate critically the antecedents of employability and analyse the context specific conceptualisations in terms of their relevance for part-time students.
- **RO2** Evaluate existing models and frameworks of employability and critically analyse and synthesise their significance for part-time students.
- **RO3** Conduct quantitative research with part-time students to explore and determine their perceptions of the conceptualisations of employability.
- **RO4** Analyse primary findings to gain a better understanding of the conceptualisations of employability to determine a model of employability which is appropriate for part-time students.

- **RO5** Empirically test the model for assessing employability for part-time students

- **RO6** Draw conclusions from the research to contribute to the employability debate through conceptualising the meanings of employability through the design and development of an employability model and self-assessment tool for part-time students.

1.5 Potential Outcomes of the Study and Implications for HEIs and Part-time Students

Extensive research exists on the subject of both graduate employability and graduate identity as evidenced in studies such as those presented by Boden and Nedeva (2010); Hinchliffe and Jolly (2011); Holmes (2013a and b); Knight and Yorke (2004) and Tran (2014). It is, however, evident when reviewing literature and research within the field of employability that there is limited empirical research on how models of employability relate to the career preparedness for part-time students.

Through gaining an understanding of the meanings of employability for part-time students, it is possible to evaluate current practice and identify potential gaps within existing employability models and frameworks. In turn, this will contribute to existing conceptual and empirical themes of graduate employability and broaden the context in which employability is considered. The study will also provide a specific focus for the future development of a flexible employability framework for part-time students.

This research will therefore make a valid contribution to understanding theoretical perspectives of graduate employability through critically analysing both theoretical and empirical research. It will be of interest to key stakeholders namely, HEIs, employers, students and the wider economy.

The research will add to professional practice in terms of contributing to pedagogic and curriculum design. The research will also contribute to practice in terms of contributing to the employability agenda for HE providers and the critical theorisation of graduate status for part-time students. The research will further contribute to professional practice in terms of gaining an understanding of how employability agendas relate to the workplace, which in turn, can influence economic growth and competitiveness. It will further contribute to the development of strategies to support HEIs to cultivate career development opportunities for part-time students.

1.6 Rationale and Motivations for the Study

Through teaching on both full and part-time programmes of study as an academic and senior lecturer, it was evident that the drivers for study amongst part-time students can differ significantly in comparison to full-time students. This has been observed in terms of both the level of study as well as the mode and programme of study. From teaching part-time students on both undergraduate and postgraduate programmes, including degree apprenticeships, distance learning and taught programmes, it was evident that some students are studying to upskill whereas others are seeking a change of career or entry to the labour market. I identified a gap in existing models of employability and lack of empirical research in terms of part-time students both at undergraduate and postgraduate level. This therefore links to the rationale for including both undergraduate and postgraduate students within this study to ensure an inclusive model of employability for all part-time students could be developed.

Defining employability and the development of an employability toolkit such as that suggested by the HEA (2013) provide a framework and strategic direction for HE providers. Within my role as a Senior Lecturer in a Business School, I teach both full and part-time students and it is evident through my own experiences that a degree can have different meanings for part-time students. As such, part-time students who are already employed have varying motivations for acquiring a degree and these can be very different to their full-time counterparts. Part-time students are not a homogenous group, their perceptions and motivations for study will differ across

disciplines and subject areas (Little, 2005). Learning pedagogies therefore need to respond to such differences but as identified by Butcher (2015), are HE strategies and policies meeting with the motivations for study amongst part-time learners or are they being side-lined to fit alongside their full-time counterparts? Bennon *et al.* (2011, p. 145) suggest: “*research on the impact of part-time study on graduates and any benefits that accrue to the individual or society is rare*”.

Whilst the overarching aim of this study is not to evaluate the impact or benefits of the part-time study, it certainly forms part of this research in order to appreciate the importance of providing such opportunities. It supports the need to consider how HE providers develop employability strategies for all learners in order to respond to the perceptions and expectations of all stakeholders. It also questions whether the conceptualisations and models of employability are relevant regardless of mode of study or is it time to move away from the employability discourse and identify a separate pedagogical approach for part-time students. As identified by Wittekind, Raeder and Grote (2010, p. 566) “*Employability is highly important to individuals in coping with job insecurity*”. Based on this perspective, job insecurity could be a motivational factor for individual learners to engage with part-time HE. This study will therefore incorporate this concept further to identify the relevance of motivational factors within the antecedents of employability.

The motivation for this study is therefore to bridge the potential gaps in both theoretical and empirical research surrounding part-time students in HE, with the emphasis being on evaluating the antecedents of employability and critically analysing such conceptualisations in terms of their relevance for part-time students. Whilst HEIs along with other policy makers, academics and practitioners seek to consider their interpretations of employability, background research into the subject area recognises a gap in both theoretical and empirical research in terms of both the overall experience for part-time students and the conceptualisations of employability. The philosophical underpinnings of researchers within the field of employability also contributes to the debate of graduate employability and/or graduate identity. The aim of this study is however, to remain objective and consider holistically the current

conceptualisations and the varying dimensions of graduate employability and to establish significant factors which are pertinent for part-time students.

1.7 Chapter Outline

Chapter 1 introduces the overall context of the study and details the aims of the research. This chapter provides an overview of the conceptualisations of employability and the profile of part-time students. The rationale for the study is presented and the contribution to knowledge and professional practice identified, alongside personal motivations for this research.

Chapter 2 presents a review of extant literature and analyses the discourse of employability. This includes a critique of the differing theoretical perspectives comprising individual, organisational and educational. The review of the literature evaluates the dimensions of capital, career management and overall context of employability, building on the work of Williams *et al.* (2016) and Tomlinson (2017). The dimensions are further considered in terms of employability models such as the USEM (Knight and Yorke, 2003); CareerEDGE (Dacre-Pool and Sewell, 2007) and Career Management (Bridgstock, 2009) with a specific focus on their significance and suitability for part-time students.

Chapter 3 details the research methodology, design and methods adopted with this study with an emphasis on justifying the research approach and strategy adopted to undertake the primary research data collection in two stages. This includes an overview of the philosophical underpinnings supporting the study.

Chapter 4 focuses on Stage 1 of the data collection and presents the data findings and analysis through the employment of exploratory factor analysis (EFA). The chapter concludes with the presentation of a conceptual model and identification of hypotheses for further testing and analysis within the empirical stage of the study.

Chapter 5 presents the data findings from Stage 2 of the data collection and analysis through confirmatory factor analysis (CFA) and structural equation modelling (SEM). The conceptual model presented at the end of Chapter 4 is thereby empirically tested resulting in the development of a career enhancing model of employability for part-time students.

Chapter 6 concludes the thesis through a review of the research question and objectives defined in Chapter 1 and a discussion of the overall findings and proposed model. The implications for both knowledge and professional practice are presented to demonstrate the value and contribution of this study.

CHAPTER TWO

Literature Review

2.0 Chapter Overview

This chapter provides a critical review of the literature dealing with the conceptualisations and antecedents of employability (Research objectives 1 and 2). The relevance and completeness of various models of employability relative to part-time students are addressed within this chapter.

This chapter commences by evaluating employability and considers potential differences between the terms *employability* and *graduate employability*. This closely aligns with the next section which expands on the conceptualisations of employability and its association with HE.

Competing theoretical viewpoints associated with educational and governmental perspectives, organisational and individual perspectives are considered next. This links to the fourth section which focusses on the discourse of employability and considers the numerous approaches to graduate employability. This builds specifically on a recent systematic literature review undertaken by Williams *et al.* (2016) and a study by Tomlinson (2017). The dimensions of employability of capital, career management and context as highlighted within the work of Williams *et al.* (2016) are further explored with a focus on their potential significance for part-time students.

A key part of this literature review is a critique of existing models of employability such as USEM (Yorke and Knight, 2003); CareerEDGE (Pool and Sewell, 2007) and Career Management (Bridgstock, 2009) which are therefore evaluated and synthesised to conclude this chapter. Gaps within such models are framed to substantiate the purpose and rationale for this study. The rationale for focussing on the work of Williams *et al.* (2016) will be expanded on accordingly in section 2.5.

2.1 Defining Employability

It is evident from a review of literature that graduate employability has generated interest within both academia and a business context as well as the wider economy and government policy. Graduate skills and attributes are commonly referred to within the concept of graduate employability, particularly in terms of what attributes a graduate should possess to enhance their employability. Reference is also made to career management skills (Bridgstock, 2009). The context and potential impact of graduate employability is evidently far-reaching and consequently there is a plurality of extant literature, which attempts to conceptualise the factors and dimensions of graduate employability.

Tomlinson (2017) claims that the interest in the subject area of graduate employability has escalated since the start of this century due to the strengthening of the relationship between HE and the economy. This literature review will therefore consider and explore the antecedents of employability further in order to investigate the context in which they relate to the career readiness of part-time students.

The two terms *employability* and *graduate employability* are used interchangeably within this study. Arguably, employability can, however, be considered more broadly and is not exclusive to graduates, it effectively encompasses employees within the workplace with or without a degree. A graduate is defined as someone who successfully completes a degree (Collins, n.d.). Hillage and Pollard (1998, no page number) define employability as:

“Being capable of getting and keeping fulfilling work. More comprehensively, employability is the capability to move self-sufficiently within the labour market to realise potential through sustainable employment. For the individual, employability depends on the knowledge, skills and attitudes they possess, the way they use those assets and present them to employers and the context (e.g. personal circumstances and labour market environment) within which they seek work”.

Hence, this definition relates to all individuals and not just students and graduates. In contrast, Knight and Yorke (2003, p. 3) define employability from the specific graduate perspective 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”.

Within this definition, attention is drawn to the word “*graduate*” and a distinction can therefore be determined between the differing definitions, the former encompassing the wider labour market and the latter focussing primarily on employability from the graduate perspective. The difference between the two terms is further identified in the work of McQuaid *et al.* (2005, p. 191) who posit that policies surrounding employability relate to “*both unemployed people seeking work and those in employment seeking better jobs with their current or a different employer*”. The paper by McQuaid *et al.* (2005) focuses on labour demand and supply and policymaking, the attention being on wider issues of employability and policy in terms of the labour market and impact on the economy. McQuaid *et al.* (2005) is also critical of the predominately skills led and attributes approach to employability, and calls for a broader framework. This includes making provision for an individual’s personal circumstances such as social and household settings along with consideration of external factors such as demand. Whilst the concept of employability put forward by McQuaid *et al.* (2005) appears particularly relevant for part-time students, the focus of their study is not primarily on graduate employability and links more holistically to employability in general.

Research studies undertaken by Finch, Hamilton, Baldwin and Zehner (2013); Knight and Yorke (2003 & 2007) and Tomlinson (2012) position their emphasis more on graduate employability. Such studies contribute to the body of knowledge in terms of graduate employability, including evaluating what employers seek in their selection processes for recruits at that particular level. Hence, such studies appear to relate more to full-time students seeking work whereas the work of McQuaid *et al.* (2005)

appears to encompass the wider debate of employability and arguably might have more emphasis and meaning for part-time students, particularly in terms of consideration of their personal circumstances.

Reference to the term employability has attracted some criticism, as posited by Pascale (1995, p. 21) who argues that employability is “*an ill-thought out concept infused with more hope than substance*”. This study was, however, in 1995 and arguably, the employability debate has since moved on. Yorke and Knight (2008) acknowledge that some HE providers still have concerns about the term employability and suggest that some academics believe it is a fad whilst others offer a more positive stance. This is largely due to graduate concerns over potential employment opportunities within a competitive environment, alongside HEIs being particularly concerned due to the influence it can have on key performance indicators and league tables (McMurray, Dutton and McQuaid, 2016). It is, however, apparent that since the review by Yorke and Knight (2007), the employability debate, has gathered further pace as evidenced by the development of the HEA Framework for Employability in 2013. Hinchliffe and Jolly (2011), based on the Dearing (1997) and Leitch (2006) reviews, acknowledge however, that the approach by government has been prominently skills-led.

Studies such as those undertaken by Holmes (2013), Hinchliffe and Jolly (2011) and Cashian (2017) acknowledge the employability debate but question if the term is becoming a little outdated and if it time to move on and focus more on graduate identity. Holmes (2013) also argues that graduate employability is not just possessional in terms of the possession of particular skills and attributes or acquiring a position but it is also about the positional and the processual aspects in terms of progression. Part-time learners may therefore relate to the positional and processual employability debate in terms of career enhancement if they are already employed but seeking to either secure their current position, move sideways, be promoted or alternatively change employer or career. However, for those part-time students within neither employment nor suitable employment, it may be about the possession of employment and recognition that they need to develop their skills, knowledge and attributes and obtain a degree to gain employment. It is evident through informal

discussions with part-time learners that their motivations for study vary. This therefore adds further complexities to HE providers in terms of being able to offer programmes of study which enhance the career readiness and employability of their learners, regardless of their motivations or drivers to study.

The underlying theme of this study is therefore reference to the term graduate employability, and whilst aspects of this will inter-relate and link to conceptualisations of graduate identity and refer to identity capital, the focus is on graduate employability and its significance for part-time students in terms of their career enhancement.

2.2 Conceptualisations of Employability

Graduate employability is a multifaceted concept, as illustrated above, and as a result, there are numerous definitions associated with both the term employability and graduate employability. In order to provide a comparison of the differing definitions, Table 2.1 summarises the main themes and conceptualisations within extant literature. The table does not differentiate between definitions of graduate employability and employability in its general sense due to the boundaries that merge in terms of the overall concepts and principles, the focus of graduate employability is, however, primarily on students as opposed to the wider population.

Author(s) Year	Definition	Cited In
Bowden <i>et al.</i> (2000)	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”.	Bridgstock (2009), (2011)
CBI (1999, p.1)	“Employability is the possession by an individual of the qualities and competencies required to meet the changing needs of employers and customers and thereby help to realise his or her aspirations and potential”.	McQuaid and Lindsay (2005) Higdon (2017) Cole and Tibby (2013)
Dacre Pool and Sewell 2007 and 2012	“Employability 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”	Cole and Tibby (2013)
Forrier and Sels (2003, p.106)	“An individual’s chance of a job on the internal and/or external labour market”	Wittekind, Raeder and Grote (2010)

Harvey (2003)	“Employability is not just about getting a job. Conversely, just because a student is on a vocational course does not mean that somehow employability is automatic. Employability is more than about developing attributes techniques or experience just to enable a student to get a job, or to progress with a current career. It is about learning and the emphasis is less on ‘employ’ and more on ‘ability’. In essence, the emphasis is on developing critical, reflective abilities, with a view to empowering and enhancing the learner”.	Cole and Tibby (2013)
Hillage and Pollard (1998, p.24)	“The ability to realise potential through sustainable employment”.	Rothwell, Herbert & Rothwell (2007) Rothwell and Arnold (2007)
HM Treasury, 1997, p.1	“Employability means the development of skills and adaptable workforces in which all those capable of work are encouraged to develop the skills, knowledge, technology and adaptably to enable them to enter and remain in employment throughout their working lives”.	McQuaid and Lindsay (2005)
Knight and Yorke (2003, p.3)	“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”	Delaney & Farren (2016) Pool, Qualter & Sewell (2014) Cashian (2017)
Rothwell and Arnold (2007)	“The ability to keep the job one has or to get the job one desires”.	
Rothwell, Herbert and Rothwell (2007)	“subsumes a host of person-centred constructs” and “synergistic combination’ of career identity, personal adaptability, and social and human capital”.	Rothwell, Herbert and Rothwell (2007)
Yorke and Knight (2008, p.158)	“A graduate’s (or other awardee’s) suitability for appropriate employment” and “actually getting an appropriate job, which is dependent on factors such as the state of the economy”.	

Table 2.1 – Definitions of employability and graduate employability

The CBI (1999, p. 1) links employability to the possession of “*qualities and competencies*” which an individual should develop whilst studying. Therefore, within this definition the focus is very much on possession which is expanded on in the work of Knight and Yorke (2003). The authors acknowledge that the acquisition of skills, knowledge and attributes will improve an individual’s employability which will be of benefit not only at an individual level but also the economy and wider community. This also relates to the earlier work of Bowden *et al.* (2000) who also associate employability with the acquisition of skills and understandings whilst at university and acknowledge the benefits this provides both in terms of an individual’s career and contribution to society. This is further acknowledged in the work of Bridgstock (2009 and 2011) and association between employability and career management. The concept of employability is thereby associated with the attributes a

student should acquire in order to benefit themselves to secure employment but which will also benefit the economy. Employability is therefore considered both at the individual level and wider impact on the economy whereas authors such as Hillage and Pollard (1998) and Forrier and Sels (2003) provide greater emphasis on employability at an individual level to secure or maintain employment.

Rothwell and Arnold (2007) also associate employability at an individual level but their definition arguably relates to part-time students in terms of recognising that employability links to being able to retain their current position or seek a new position. Therefore depending on the individual's motivation to pursue either an undergraduate or postgraduate degree will be influenced by their personal drivers and as such will relate to some of the definitions more closely than others.

Harvey (2003) breaks down the term employability and highlights that the focus should be on the learner being empowered with more emphasis on ability as opposed to employ. This therefore offers a different dimension in terms of employability not just being about graduate attributes as defined by Dacre Pool and Sewell (2007) and Knight and Yorke (2003) but extends further through the development of reflective and critical thinking. Cole and Tibby (2013) acknowledge this within their study on behalf of the HEA to develop a framework for HEIs.

As depicted in Table 2.1 and the subsequent critique, numerous definitions are presented in an attempt to construct both the term employability and graduate employability. Some similarities can, however, be drawn within the definitions, particularly in terms of personal development. Yorke and Knight (2008, p. 158) interpret employability as being linked to a graduate being suitable for employment, the emphasis being on the word "*suitability*". Yorke and Knight (2008) acknowledge that this is different from actually securing a suitable job which can be influenced by the supply and demand of graduates and the state of the economy. Based on this argument, employability is therefore much more far-reaching than just securing employment. A graduate could secure employment but are they equipped with the necessary skills, knowledge and attributes that the employer is seeking?

Reference to skills features throughout the discourse of employability and are associated with career readiness and development. Employability skills are explained by the Higher Education Funding Council for England (HEFCE) as:

“Transferable core skills that represent functional and enabling knowledge, skills, and attitudes required in today's workplace. They are necessary for career success at all levels of employment and for all levels of education” (HEFCE, 2006).

Based on a study by Tymon (2013), employers have indicated that graduates arguably lack the skills that they are seeking. More recently, research undertaken by McMurray *et al.* (2016) which identifies important factors when recruiting business graduates, acknowledges concerns surrounding poor CVs, lack of preparation and poor performance during interviews. The study also highlights the benefits of work experience to enhance employability due to its association with the development of soft skills and confidence generally. The study by McMurray *et al.* (2016) was however, based on Business students within the Scottish workforce and the study therefore has its limitations in terms of both the industry sector and geographical area. The mode of study within this research is also not identified and it is therefore unknown if the data included part-time students.

Research undertaken by Yorke and Knight (2007) also considers the employers perceptions of what they require when hiring a new graduate. The study identifies four significant attainments detailing what a graduate should be in possession of when entering the world of work. These attainments include skills, efficacy beliefs, being able to provide evidence of understanding and metacognition. The development of the USEM model by Yorke and Knight (2003) represents the significant output of this research, which is explained further in this chapter. Reference to the possession of generic skills, which employers seek, is not however, without criticism with studies such as that offered by Bridgstock (2009) suggesting career management as an alternative methodology to the predominant skills approach. One contribution of this study therefore is to identify a model, which will contribute to the professional practice for employers.

Dacre Pool, Qualter and Sewell, (2014, p. 304) also recognise difficulties associated with defining employability and identify the issue as potentially “*highly contentious*”, particularly in terms of “*how*” and even “*if*” we should attempt to measure it. Such measures to determine employability include the annual Destinations of Leavers from HE (DLHE) survey of graduates who secure a full-time graduate position within six months of graduation. Dacre Pool *et al.* (2014) have some concerns over this approach in terms of linking employability to employment, a view also shared by Bridgstock (2009) and Pegg *et al.* (2012).

Dacre Pool *et al.* (2014, p. 304) acknowledge measuring employment rates as a “*quick and convenient*” approach to “*employability*” but are critical and make reference to potential issues of it taking longer than six months to secure their graduate position. A further criticism is that the actual HEI attended could affect opportunities combined with factors such as social class and work experience. Of more significance is the reference made by Dacre Pool *et al.* (2014, p. 304) to “*mode of study*” as an influencing factor of employability. This links directly to this study and where the mode of study for part-time students differs from more traditional taught full-time programmes. Therefore, whilst employment might be a graduate outcome in itself and be beneficial in terms of a measurement tool for HE providers, employability is also associated with “*the teaching and learning of a wide range of knowledge, skills and attributes to support continued learning and career development*” (Pegg *et al.*, 2012, p. 7). This is particularly important and relevant for part-time students who are seeking to achieve their “*personal learning goals*” and improve their “*employment prospects*” (Pegg *et al.*, 2012, p. 7) through their engagement with lifelong learning. Indeed, Jackson (2014, p. 136) highlights the importance of determining the differences between “*graduate employability and graduate employment outcomes*”. Referring to the work of Pegg *et al.* (2012), reference is also made to “*blurred boundaries between a graduate who is considered employable and one that is able to secure employment*” and employability is therefore not just about the initial acquisition of employment but relates also to “*enhancing professional well-being and career development prospects*”. This is particularly relevant for part-time students and for improving social mobility.

Jackson (2014, p. 137) offers the following definitions to differentiate between the meaning of graduate employability and graduate employment. Graduate employability is described as requiring the development of:

“A wealth of attributes, skills and knowledge which will assist graduates in applying their disciplinary knowledge in the workplace; as well as technical expertise, career development skills and engaging in extra-curricular activities and work experience”

In contrast, graduate employment relates to the outcomes which:

“Are measures of achievement in the labour market? These include full-time job attainment, time taken to secure employment, salaries at different career stages and job characteristics”

This view further supports the need for further study like the one to be presented in this thesis, to determine the relevance of current strategies in supporting part-time students with enhancing their careers through engaging with HE study. The term employability is associated within the context of an individual learner obtaining employment in a new area, initial employment or maintaining employment and certainly, within this context of part-time students, it could arguably be studying to maintain their current employment or to find a new role. Employability within this context is therefore largely based at an individual level. This is however, also subject to some criticism in terms of employability being considered *“a characteristic of the individual”* (McQuaid and Lindsay, 2005, p. 199) and the argument that taking such an approach fails to recognise that the economy plays a significant role in the success of being employable. McQuaid and Lindsay (2005) point out that even a person considered as highly skilled could become unemployed in time of recession. External forces can therefore influence an individual’s employability particularly in terms of supply and demand. For example, if there is a lack of supply in terms of appropriate candidates for the position, an employer may have very little choice in terms of selecting a suitable candidate.

The challenge for HE providers is therefore to incorporate skills, knowledge and attributes within the curriculum in order to meet the perceived skills shortage and the expectations of potential employers whilst also meeting the expectations of students in terms of their career readiness. Whilst part-time students completing a degree effectively become a graduate, depending on their motivations and / or drivers to study, they might not be seeking a graduate position. This highlights the need to determine the relevance of the conceptualisations of skills, knowledge and attributes and models such as USEM and CareerEDGE (to be presented later in this literature review) to part-time students. Arguably, some part-time students from an individual perspective will relate to the models more than others will, in order to direct them to secure employment or advance their career. This could suggest that the models simply depict opportunities to develop an individual's employability but they are not a cure or a solution.

One of the most recent contributions to the subject area of employability is by Higdon (2018), who suggests the term is associated with six key issues. In the first instance, Higdon (2018) associates it with focussing on the acquisition of skills within undergraduate programmes. No distinction is however, drawn within this reflection on the mode of study and reference to post-graduate study is also excluded from Higdon's work. This is potentially a narrow view of graduate employability where the focus appears only to be on full-time undergraduates. As previously posited by Cole and Tibby (2013), employability relates to all students, regardless of mode of study. Higdon (2018) claims it also relates to the emphasis being on the employers' views and their associated definitions of employability, a view which Higdon (2016) has been critical of, calling for the views of students and graduates to be further taken into consideration. Economic growth and the development of both policies and strategies to link both work and education offers a third conceptualisation of the term employability. The promotion of work experience features next within Higdon's analysis (2018) although part-time students could find it more difficult to relate the relevance of this conceptualisation to their situation, given that they are most probably already working alongside their part-time studies or have had some previous form of work experience. Statistics relating to the length of time it takes a graduate to obtain employment after graduation is the fifth area of reflection within Higdon's

(2018) study. This relates largely to the DLHE survey where statistics from part-time learners are also included. For part-time students who are currently employed and have engaged with HE to support or further their career with the current employer, the meaning of this perspective will not have the same relevance for someone seeking a new position. Finally, Higdon (2018, p. 35) suggests “*strong collaborations between education, business and industry*” are used within the discourse of employability and this provides a “*focus on business goals and ideals which are underpinned with business theories*”. Higdon (2018) calls for more research on the student perspective and identifies a potential gap within existing studies. This study therefore addresses some of the potential gaps in determining the student perspective, particularly the perceptions of part-time learners.

Higdon (2018, p. 35) summarises employability as being a “*common feature of government policy covering education, work and culture*”. Whilst recognising reference to employability is widely used within extant literature, the actual discourse of employability is largely influenced by the theoretical perspectives in which it is considered. Reference to employability can therefore be interpreted in a number of ways and is recognised as being complex “*due to difficulties with definition and conceptual clarity*” (Dacre Pool *et al.*, 2014, p. 303). The next section will explore further the differing theoretical perspectives from which employability can be considered and which in turn links directly to Chapter 6 which considers the contribution of this study to knowledge and professional practice.

2.3 Competing Theoretical Perspectives

Guilbert, Bernaud, Gourvernet and Rossier (2016) distinguish three competing angles in which the concepts of employability can be considered, categorising these within the following three perspectives:

- Educational and governmental
- Organisational
- Individual

The study will therefore take into account these perspectives in conjunction with the broader interpretations of graduate employability. This will include the educational

and governmental positioning whilst also taking into account the organisational and individual perspectives of part-time students. This will include reference to terms such as capital, career management and boundaryless career. The organisational construct closely aligns to the individual level as defined by Van der Heijde and Van der Heijden (2006, p. 449) “*employability is a critical requirement for enabling both sustained competitive advantage at the firm level and career success at the individual level*”. Each perspective therefore has a potential influence and relationship with graduate employability. Figure 2.1 summarises the interconnecting relationship of the perspectives, which are considered within this literature review and study.

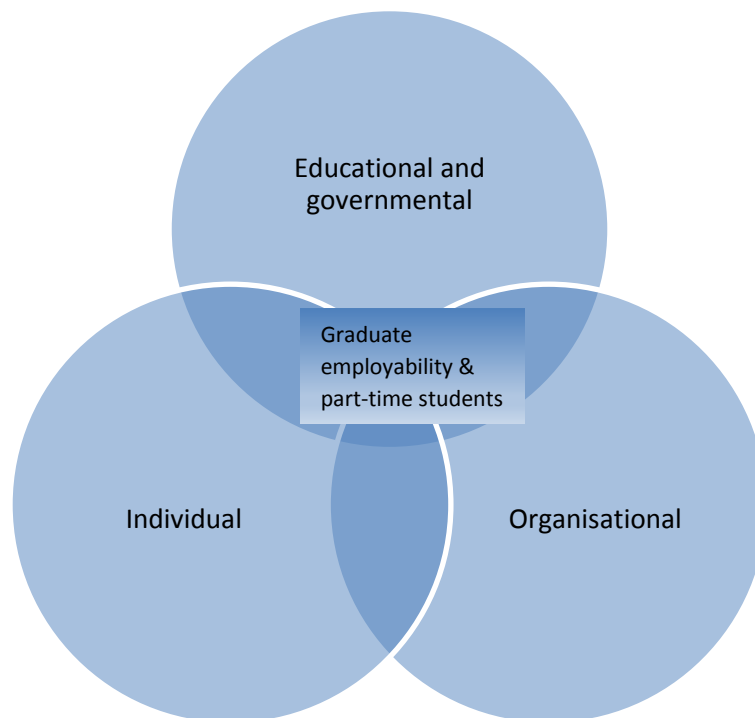


Figure 2.1 Concepts of employability – three interconnecting perspectives

The perspectives summarised in Figure 2.1 align to the theories put forward by Tomlinson (2017) who suggests that graduate employability can be understood from a macro, meso and micro level. Within the macro level, Tomlinson (2017, p. 9) links employability to it being “*located in wider structural, system-level shifts in capitalism and how educations system are co-ordinated within that framework*” essentially to understand employment opportunities which are heavily influenced by changes in the economy and how these “*intersect with structural changes in the*

educational system and class structure". This is closely linked to educational and governmental perspectives but intersecting with the two other perspectives.

At a meso level, "*employability and people's work –related activities are mediated by institutional-level processes*" and these are located within the domains of both education and organisations (Tomlinson, 2017, p. 10). At this level, there is a clear link and association between all three perspectives. Within HE, the focus of attention is on the curriculum, generic and subject-specific skills and knowledge along with the degree credentials of the person seeking employment. Graduate employability is further enhanced by the work organisations, which the graduates enter, or in the case of part-time students, potentially the place in which they are already employed. Knowledge and skills are therefore potentially developed and enhanced within the workplace. Tomlinson (2017) explains this in terms of HE providing the supply-side to the employment market whereas the demand-side of employability is the work organisation. Building on the earlier theories of Keep and Mayhew in 2010, Tomlinson (2017, p. 11) suggests career development subsequently takes place within the organisation, influenced by "*aspects such as workplace design and culture, working conditions, the regulations of learning opportunities and professional development and supervisory/management-level support*". This theory therefore appears particularly pertinent to part-time students who are seeking new learning opportunities. Career development as opposed to employability appears to be a key factor for some part-time students but this clearly will differ and is largely influenced by the individual motivations to study.

At a micro level, Tomlinson (2017, p. 11) argues that the focus is on "*how employability is constructed at a personal level and its relationship with a range of subjective, biographical and psycho-social dynamics*" and relates this to being based on the culture and backgrounds of the individuals. This primarily relates to the individual perspective depicted in Figure 2.2 but will intersect with the other two perspectives as both of these factors will influence how an individual will negotiate their development. Tomlinson (2017) further reinforces that it is within this level that we gain a better understanding of the meanings of what employability means to individuals and how they make use of their experiences and personal relationships to negotiate the job market, this linking to social capital and its association with

networks. It is at the micro level that this study will primarily focus in order to gain a better understanding of how individual part-time students view their employability and how HE and the antecedents of employability relate to this. This is explored further in Chapter 4 and further developed and tested in Chapter 6. It is also evident that there are indeed multiple constructs and dimensions associated with the concept of employability and again these will be explored and evaluated further within this study within the context of part-time students.

2.3.1 Educational and Governmental Perspectives

The association between HE, employability and links to the economy have existed for some time. The Robbins Report in 1963 identified the aims of HE and this included reference to the development of skills and its contribution to the distribution of labour (Yorke, 2006). This association links the findings of the Dearing Report (NCIHE, 1997) which asserts the crucial role which HE makes to the global competitiveness and the economy. The outcome of this report is considered by Yorke (2006, p. 3) who suggests “*The employability of graduates has become an aim that governments around the world have, to varying extents, imposed on national higher education systems*”. The link between educational and governmental perspectives is evident within this statement. Yorke (2006, p. 3) further signifies that this in turn “*reflects an acceptance of human capital theory*” and the willingness for governments to accept such theories in order to increase productivity of the workforce. The construct of human capital is explored further within this chapter and closely aligns with the skills and knowledge approach to employability.

Tomlinson (2017, p. 1) asserts that the “*very term ‘graduate employability’ has become synonymous with the ways in which the relationship between higher education and the economy is now understood*”. Tomlinson continues to suggest that it appears widely accepted that HE plays an integral part in the prosperity of the economy, graduates being “*positioned as key players on the economic stage whose role and input in the labour market is of huge significance*” (2017, p. 2). Part-time students are arguably best placed to contribute to this further, particularly if already working and looking to develop their knowledge and skills. This further reinforces the need to consider part-time students and the development of their employability

due to the potential benefits such students have on the wider economy. Employability strategies and frameworks developed within HE arguably need to be based on a separate model for part-time students in order to fulfil their individual needs and consider the diversity which can exist amongst such learners.

The viewpoint put forward by Tomlinson is not new, the Dearing Report in 1997 emphasised the requirements for HE to develop employability skills amongst students to improve their employability on graduation (Dearing, 1997). Tomlinson (2017, p. 2) links this to the “*economic purpose of universities*” and makes the point that many career services within HE are being developed into both employability and careers units and seek to “*develop institutional strategies that enhance the employment outcomes of their graduates*” (2017, p. 2). Cole and Tibby (2013) previously suggested a framework to facilitate HE providers in the development of such strategies but reference to part-time students is largely overlooked.

HEIs arguably need to determine if their approaches to employability sufficiently consider the diverse nature of part-time learners or as Butcher (2015) previously indicated, such learners are at risk of effectively being “*shoe-horned and side-lined*” alongside their full-time counterparts. The research by Butcher (2015) considers the challenges faced by part-time students and their experience within HE. Graduate employability is essentially part of this experience and is subsequently a potential challenge that part-time students face, thus are HE providers identifying suitable strategies for all learners, regardless of mode of study? Yorke (2006, p. 3) has previously asserted that employability “*is not merely an attribute of the new graduate. It needs to be continuously refreshed through a person’s working life*”. Yorke (2006) further recognises that there can be an assumption that when considering employability, we tend to think of graduates as young people. Yorke (2006) argues that by adopting this perception we are not taking into the account the potential which mature graduates could offer particularly in terms of life-experience. Butcher (2015) also posits that in order to develop social capital and widening participation and social mobility, policies surrounding education need to extend to mature and part-time students. This further reinforces the need to take into account the requirements of such students when developing institutional strategies.

Yorke (2006) suggests HE is evidently not just about preparing graduates for the world of work but also plays a key in lifelong learning. Yorke (2006, p. 5) cites the example that HE also further educates “*the middle manager so that he or she can manage more effectively, in ‘upskilling’ the teacher or process worker, facilitating the development of active citizenship, and so on*”. This further demonstrates the link between HE and part-time students who may be returning to study to develop, to upskill for example, or to seek alternative employment. HE and its association with employability is therefore not just about gaining the initial acquisition of employment but relates also to maintaining and obtaining new employment if desired as previously claimed by Hillage and Pollard (1998).

Tomlinson (2017, p. 2) further highlights the existence of a relationship between the economy and HE and its association with graduate employability and makes the point that “*as recipients of higher-level knowledge and training, graduates are often depicted as ‘knowledge workers’ who will add considerable economic value through the application of their advanced skills and knowledge*”. It is however further recognised by Tomlinson that career paths are less stable even for knowledge workers due to external factors such as “*organisational restructuring, company divestment to cheaper production locations and continued downsizing of professional core workers*”. This concept is particularly relevant for part-time students who may be seeking to develop their employability skills as they recognise that they need to respond to changes within the economy and organisational structures. HE providers therefore not only need to factor into the equation the challenging political landscape when developing their institutional strategies and employability agendas, but they also need to consider the needs of all students, regardless of mode and programme of study. This thereby links to pedagogical approaches and purpose of this study to determine how existing conceptualisations are utilised to support and develop part-time programmes of study.

In terms of the link between HE and the labour market Cai, (2013, p. 457) argues “*one of the most basic functions of education is to cultivate people to meet the needs of the labour market*”. Cai (2013) further acknowledges that since the 1960s several studies consider the link between employment and education which is related to

Becker's and Schultz theories of human capital in the 1960s or the later theories in the 1970s by Spence; Stiglitz or Arrow who refer to screening models, the focus of such studies primarily being measured on the first destination of employment after graduation (Cai, 2013).

Nilsson (2017, p. 70) further asserts the connection between HE and the labour market stating, "*employability has become a central concept in discussions of the relationship between higher education and the world of work and has acquired increasing prominence in both national and international political debates and academic papers in various disciplines over the last 20 years. The concept has also become one of the cornerstones of labour market policies as well as educational and employment strategies in Europe*". The value of HE to the labour market is therefore argued in extant studies and for those part-time students who are already working, they are arguably meeting some of the needs of the labour market. How HEIs can enhance this contribution further in terms of the curriculum design and career enhancement opportunities for part-time students is considered further in this study.

Studies by both Cai (2013) and Nilsson (2017) offer perspectives on the educational and governmental perspectives of employability. The importance of employability and its link to the labour market is reinforced further in the work of Kovalenko and Mortelmans, (2014) who identify the link between employability and economic competitiveness alongside improving rates of employment in developed countries. Davey and Tucker (2010) acknowledge the drive for students to develop their employability skills which is driven by the expectations of HEIs, employers and the government link this to initiatives such as Enterprise in Education in 1995 and the Dearing Report in 1997.

McQuaid *et al.* (2005) recognise employability as a useful concept to analyse both the urban and national labour markets for both the employed and unemployed but suggest that a skills and attributes approach is a potentially narrow supply-side perspective. A broader idea for people either seeking or changing employment is to consider a demand-side perspective and personal circumstances and other influencing factors which can affect employability within differing labour markets (McQuaid *et al.*,

2005). However, as Yorke (2006, p. 4) points out “*The higher education system is subject to governmental steer, one form of which is to give an emphasis to the enhancement of the employability of new graduates*”. This perspective therefore appears to link more closely to the supply-side perspective commonly associated with a skills approach. This is therefore a potential criticism of the current approaches to employability where the focus appears to be on supply as opposed to demand. However, whilst demand will have an impact on employability, particularly if supply exceeds demand, one of the key performance indicators for HEIs is the employability status of graduates within six months of graduating. Therefore, regardless of demand, the supply side will continue as students’ progress through their education and hence why HEIs develop employability strategies and frameworks to enhance the employability opportunities for its learners. This arguably includes all students regardless of mode or programme of study.

The approach to employability therefore is an important consideration for the HE provider particularly in terms of marketing the institution and attracting students to apply and engage with HE. The marketing of programmes is again relevant for all programmes and modes of study. In a bid to attract part-time learners and develop their employability, an HEI should arguably be able to demonstrate their approach to support and develop a part-time learner. This again links to the aim of this thesis, particularly in terms of the contribution this study can make to the development of a model for use by part-time students to consider their individual needs and areas for development. The model developed thereby offers a potential marketing tool for HEIs to differentiate part-time students from learners on full-time programmes. Layer (2004, p. 12) suggests HE can contribute to improving graduate employability through securing “*curriculum change to ensure that the preparation for employment is embedded within the course for all students*”. This further supports the need to consider all students and the design of the curriculum is a key feature to facilitate this. Pedagogic frameworks therefore provide an opportunity to design and develop the curriculum to enhance the career readiness and employability of its learners, regardless of mode of study. Layer (2004) suggests there has been a significant development in the curriculum from the late 1980s and this stemmed partly from the Enterprise in Higher Education (EHE) Initiative. This was created “*to ensure greater employability amongst graduates and to meet the changing needs of the*

world of work” through the “*development of key skills within the curriculum*” (Layer, 2004 p. 16). Based on this, the design of the curriculum and a suitable framework is a good starting point to consider the general requirements of part-time students.

Frameworks which can be utilised in the development of the curriculum exist such as that offered by Cole and Tibby (2013) where HEIs are afforded the opportunity to consider their individual strategies and develop action plans. However, given the diverse nature of part-time students, in reality how do they fit within the current conceptualisations in terms of educational and government perspectives and the existing conceptual and empirical tested models, which already exist and are explored further within this study?

2.3.2 Organisational Perspectives of Employability

The dimensions of employability relate not only to the perspective of the individual but also at an organisational level. Studies such as that undertaken by Williams *et al.* (2016) consider the conceptualisations of employability with the emphasis being on the individual level, whereas in a study by Van der Heijde and Van der Heijden (2006) the emphasis is on employability within the context of organisations. Conceptualisations of employability are of significance to organisations as employers of both current and future graduates. Jackson, (2017, p. 833) acknowledges, “*there has been significant attention to what employers would define as an ‘ideal’ or ‘employable’ graduate*”. A study by Tymon (2013, p. 841) suggests, “*Employers continue to report that graduates are not ready for the world of work, and lack some of the most basic skills needed for successful employment*”. However, how does this theory relate to part-time students who may already be working and will arguably already possess some of the required skills? Certainly, the statement appears more aligned to new graduates seeking work but based on the recent introduction of degree apprenticeships, the perspective of Tymon could have a new meaning.

Organisations now have the opportunity to use the apprenticeship levy to support the training and development of both new talent and their existing workforce. Arguably, an employer could therefore see a gap in the knowledge, skills and attributes of a member of staff and recognise the importance of returning to HE to study part-time to

develop their current and future potential. Jackson (2017, p. 834) suggests, “*There is some distinction in the literature between the identity of established professionals and those entering the field*”, the latter referring to those students who transition to entry-level graduate positions. The motivations to study could therefore be an influencing factor in terms of how organisations view graduates who have completed a part-time programme. Some graduates such as those on degree apprenticeships are perhaps at the beginning of their education and work training whereas others will be experienced members of staff and considered competent within their role. The motivational factors to study could therefore influence how a part-time student views their individual graduate employability. Clearly, there is a driver to study, perhaps for some students linked to career enhancement. Students seeking this therefore, will most likely be interested to learn how their programme of study will facilitate their learning and career preparedness.

Van der Heijde and Van der Heijden (2006, p. 449) link the importance of employability within the context of career success for the individual whilst also identifying it as “*a critical requirement for enabling both sustained competitive advantage at the firm level*”. This suggests employability will facilitate employees to be able to cope with the challenges within the requirements of their job, particularly positions that can rapidly change and become increasingly demanding in order to keep pace with a changing environment. An example of this could be due to advancements within say the digital economy and potentially a greater emphasis on the need for employees to be able to develop new technological skills and knowledge. Organisations may therefore turn to their existing workforce to develop new skills as opposed to recruiting a new member of staff or graduate. Again, depending on the employment sector, the degree apprenticeship levy could offer an opportunity for both the employer and employee to enhance their lifelong learning through opportunities for further study and new qualifications through engaging with higher education. Reference is frequently made within extant literature to boundaryless careers which has been explained as boundaries being crossed within career progression (Heijde and Heijden, 2006). Part-time students therefore may need to cross boundaries within an organisation in order to progress, which could arguably be for their own personal benefit, as well as the organisation in terms of competitive advantage. Heijde and Heijden (2006, p. 451) indicate that in order for competitive

advantage to be sustained, there needs to be “*a unique combination of acquiring and retaining competent workers, and adequate HR policies and practices of investing in them*”. In response to the changing landscape within organisations, Heijde and Heijden (2006) offer a measurement instrument to consider a competence-based approach to employability. This is however, largely related to organisational perspectives whereas the purpose of this study is predominantly on the individual perspective of part-time students. There is a link between the two and as such some of the questions posed in the measurement instrument by Heijde and Heijden have been incorporated within the exploratory stage of this thesis.

2.3.3 Individual Perspectives of Employability

Employability has also been conceptualised in terms of orientation which encompasses the “*employees’ attitudes towards developing their employability for the organization*” van Dam (2004, p. 29). Driven by advancements in technology, increasing demands and expectations of clients and globalization, organisations recognised the need to consider the flexibility and adaptability of their workforce, and to support employees being open minded to change (van Dam, 2004). Forrier and Sels, (2003) relate this to internal employability which van Dam (2004) relates to the development of new skills and knowledge as well as change in employment on a regular basis. This concept of employability orientation therefore appears particularly relevant for part-time students and links potentially to their individual motivations to study. It is, however, worthy to acknowledge that van Dam (2004) suggests the notion of employability orientation differs to the term of career motivation posited by London in 1983 and 1993 and career commitment put forward by Arnold (1990) and Blau (1988). The claimed difference is that career motivation and commitment relates to the “*individuals aspirations as the starting point for career development*” (van Dam, 2004, p. 31) whereas within career orientations, the impetus is on the organisational goals and employee development. Hence, the justification for evaluating this concept further within this section.

A conceptual model developed by van Dam (Figure 2.2) considers employability orientation. Amongst the findings, van Dam (2004, p. 41) reported “*no relationship existed between affective commitment and employability orientation*” and no significant relationship was found between career development support and

employability orientation. A positive relationship was however associated between employability activities and both career development support and affective commitment. The study also established that employees with higher initiative and who were open to new experiences also improved their employability. Furthermore, the study claims that if an organisation can offer career support and assist in overcoming potential barriers, it will not influence their employability orientation. Limitations of the model have however, been acknowledged by van Dam in particular that the model might be too simple and the data collected was from just one organisation. The data collected for this thesis by contrast, is based on three institutions as discussed in Chapter 3. The study by van Dam (2004) however, provides an indication that through paying attention to employee career preferences and offering support for career development, an organisation can contribute to employee development. This is important to an organisation in terms of the adaptability of its employees and being able to respond to changing practices within the organisation.

The study by van Dam (2004) offers an important insight into the link between career development and investing in existing employees in order to respond to an organisations' objectives and goals. An organisation may therefore be more likely to support an employee's desire to obtain further qualifications if they can determine the benefit it will provide to the organisation. Therefore, generic employability strategies posited about graduate employability which appear to link more closely to full-time traditional students, justifies the need to develop a model for those students already employed and looking to develop within their existing role. This does however add a further complexity to the development of a model of employability for part-time learners due to the different motivations for study and the fact that not all students will be employed or looking to engage in HE to develop with their existing role. The learner may in fact be looking to obtain a graduate position or if already employed be seeking alternative employment. The model depicted below in Figure 2.2 is therefore of potential benefit to those employees wishing to commit to an organisation but is arguably not equally applicable or relevant for all part-time students, particularly those engaging in HE to seek a new opportunity in a different organisation. The model is also conceptual and focusses on commitment to the organisation and orientation to the company. The model therefore has its limitations due to the focus

on an individual's orientation to their current employment. As previously identified, a part-time student may be engaging in HE to pursue an alternative career and gain entry to the labour market and as such this model would not be relevant. Models of employability are expanded on further within section 2.5 but as this model is conceptual and focuses on organisation commitment, it is not expanded on further within the limitations of this study. This is due to the model being more relevant for existing employees and whilst relevant for some part-time students who are currently employed, this study explores the wider context of part-time students and includes those not working and may be seeking employment.

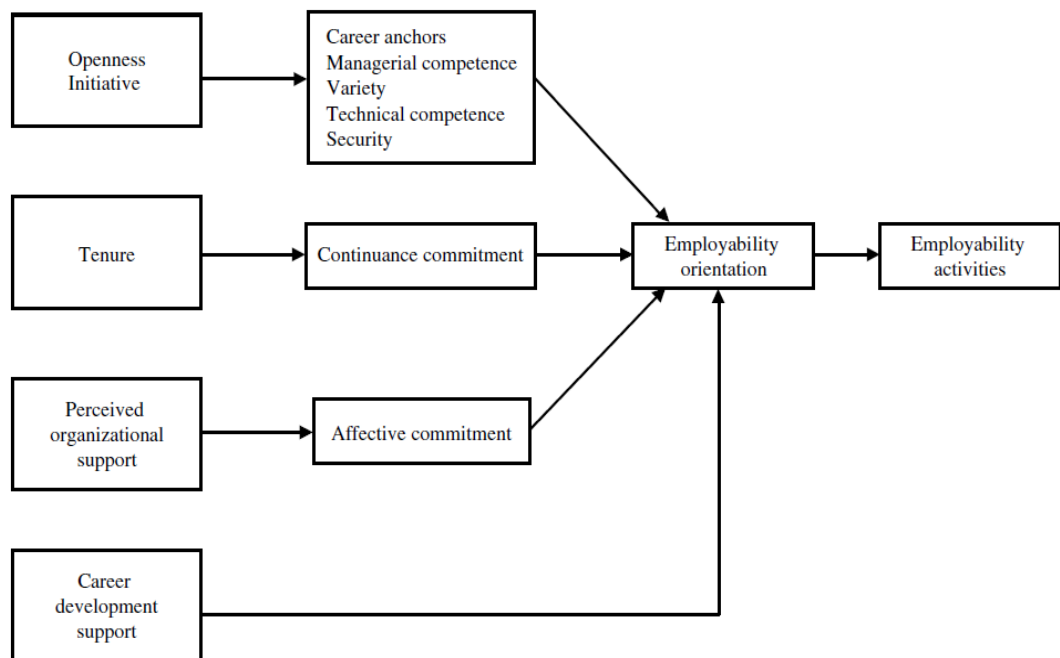


Figure 2.2 van Dam (2004, p. 32) Conceptual model of employability orientation

Rothwell and Arnold (2007) offer the self-perceived model of employability (Figure 2.3 below), which has relevance for individuals already employed who want to benchmark their perception and position within a company. This model therefore has some relevance for part-time students who are already working. However, the limitation of the self-perceived employability scale (Rothwell and Arnold, 2007), is that it relates to individuals within an organisation. Although one of the aims of the research was to “*construct a scale that measures self-perceived employability for people for whom employment in an organisation is either a current reality or a realistic prospect*”, the emphasis of the items within the questionnaire appear more

relevant for those already employed. Therefore, whilst a number of part-time students will already be working within an organisation, some part-time students are out of work and may never have worked, thereby engaging with HE to improve their prospects to enter the labour market or taking the opportunity to change career. Again, the motivations for study are therefore potentially significant but difficult to determine due to the diversity that exists amongst part-time students.

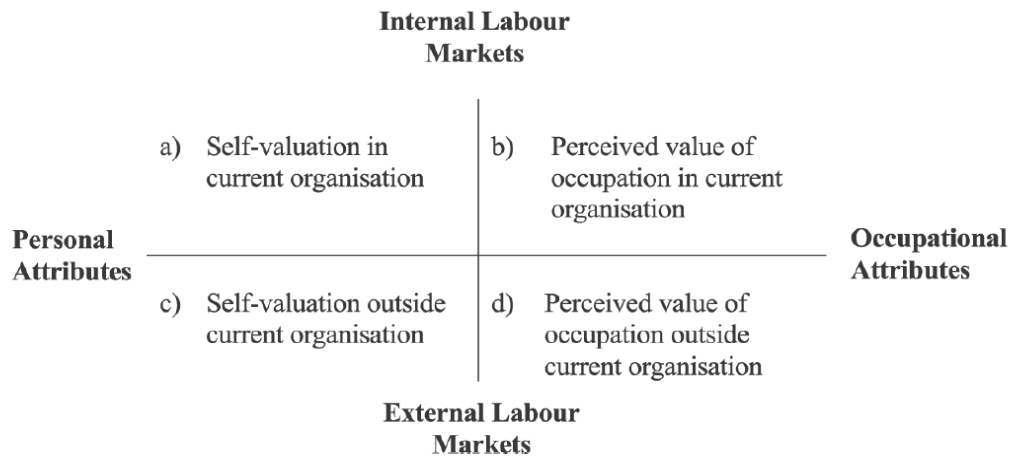


Figure 2.3 Rothwell and Arnold (2007, p. 27) Self-perceived Employability Scale

The models of employability presented by van Dam (2004) and Rothwell and Arnold (2007) therefore have some potential limitations and are arguably more relevant for those learners who are employed and looking to develop within their existing role. Both models are also quite dated in terms of their development and possibly there has been a shift in part-time learning since their creation, particularly due to the changing landscape within HE. Such changes relate to tuition fees, availability of student finance and loans and the introduction of degree apprenticeships.

Questions and items contained within the questionnaire developed by Rothwell and Arnold (2007) will arguably have differing levels of relevance for part-time students and again be influenced by the individual’s motivation for study. This appears to be a recurring theme where extant models have some relevance but need to be more inclusive and consider the differing drivers which influence part-time students to engage in HE.

A study by McQuaid and Lindsay (2005, p. 198) suggests, “*the concept of employability relates to those: in work and seeking to improve or sustain their position in the labour market; in education; and out of work*”. This observation is particularly relevant for part-time students where they could effectively be in education and out of work or within education and looking to further their career. Regardless of mode of study, whether part-time or full-time, on completion of their studies, a student is a graduate or postgraduate (if undertaking a postgraduate programme of study). When labour market demands and government policies emphasise the need for HE providers to enhance the employability of its graduates, this does not exclude part-time students who may already be employed. This is because employability does not just relate to the acquisition of a job. According to Hillage and Pollard (1998) the enhancement of employability arguably relates to the three abilities previously identified: obtaining initial employment; maintaining employment and being in a position to gain new employment if necessary. Therefore, whilst a part-time student might already be in employment, they could be engaging with HE to maintain their current employment or pursue an alternative role. How then, can HE providers address the diverse requirements of such learners within the curriculum whilst also ensuring they meet the expectations of other stakeholders such as the government and employers?

Higdon (2018, p. 35) claims that in the UK, “*employers and government departments are dominant in the conceptualisation of employability*”. In an earlier study, Higdon (2016) called for more research from the student and graduate perspective in terms of informing the curriculum and developing policies within HE. The aim of this study is therefore to contribute to existing knowledge and professional practice through exploring the conceptualisations and positing a model of employability. This therefore adds support for more empirical research from the student perspective and arguably, part-time students, to add a further dimension.

A study by Gamboa, Gracia, Ripoli and Peiro (2009, p. 634) considers employability as “*an individual’s subjective perception of the opportunities they have to obtain a job of their choice or to improve their present one, depending on their personal characteristics and the labour market*”. Therefore, whilst the demands of the labour market are influential on employability, opportunities are potentially shaped by an

individual's personal characteristics. Gamboa *et al.* (2009) relate this to human capital, which is acquired from both professional and educational experiences such as skills, knowledge and work experience. Gamboa *et al.* (2009, p. 634) summarise this by stating "*human capital therefore increases perceived employability to the extent that it represents abilities valued by employers and which can be shown in different work contexts*". This suggests both internal and external factors influence self-perceived employability at an individual level, a view also supported by Alvarez-Gonzalez, Lopez-Miguens and Caballero (2017), internal being personal, external being the contextual factors. Alvarez-Gonzalez *et al.* (2017, p. 281) extend the contextual factors to the labour market in terms of the area studied by the graduate and steps taken by the HEI to link students to the working environment through work experience and internships. The concept of self-perceived employability from both internal and external factors is therefore particularly pertinent in terms of the perspectives of part-time students.

Tymon (2013) highlights that whilst research exists on how stakeholders including employers and graduates view employability, the student perspective is not as well-known and if employability agendas are going to be effective, students need to engage with such agendas. Whilst this claim arguably relates to all students, it is a particularly important consideration in terms of how part-time students align with the concept of employability, what is their perspective of employability and what factors resonate with them when considering their employability. A study by Alvarez-Gonzalez *et al.* (2017, p. 294) found that "*self-confidence is the key variable for building up the perceived employability of university students, directly and mediating their personal characteristics and their perception of the environment and their perception about the capacity to obtain and maintain future employment*". This study does not however, define if part-time students formed part of the sample undertaken and therefore whilst the study raises a number of pertinent issues, there is again a lack of reference to part-time students supporting the need for a specific study to consider their employability.

Individual factors in terms of skills and attributes are frequently associated with enhancing employability. However, McQuaid and Lindsay (2005, p. 208) argue that viewing employability from this perspective provides a "*narrow concept*" and

suggest personal circumstances and external factors inter-relate with individual factors in order to influence an individual's employability. Rothwell and Arnold (2007) indicate, "*The proposition that employability is built upon a number of attributes seems to be widely accepted*" and refer to previously studies such as that undertaken by Hillage and Pollard in 1998. However, Rothwell and Arnold (2007) continue to make the point that individual attributes alone do not influence employability but both the internal and external labour market are also likely to affect employability. The study by Rothwell and Arnold (2007) relates to self-perceived employability, which this study views as being particularly relevant for part-time students in terms of their own self-perception and position within the labour market. This is an area which is further explored within both Chapters 4 and 5.

2.4 The Discourse of Graduate Employability

As identified previously, the three interconnecting perspectives depicted in Figure 2.1 contribute to the antecedents of employability. The perspectives therefore influence the discourse of employability, the context of which will differ amongst the various stakeholders. An organisation thereby views employability from a different dimension to both current and potentially new employees. A number of themes emerge when considering employability and along with this, a number of complexities.

Cashian (2017, p. 109) refers to the emergence of three inter-connected themes which appear to lead the work on employability. The first outlines "*lists of employability 'skills' from work undertaken with, or by, employers and professional bodies*". The term "*skills*" arguably relates to Government policies and reviews such as the Leitch Report (2006, p. 1) which identifies that "*Skills matter fundamentally for the economic and social health of the UK*". Educational policies and HEIs provide opportunities to develop such skills, which individuals utilise to benefit themselves and the organisations in which they work. Cashian (2017) further identifies "*research into factors*" which could influence employability as the second inter-connecting theme. The state of the labour market and the economy could therefore align with this. Finally, Cashian (2017) suggests the development of "*frameworks*" which consider employability as the third interconnecting theme. The development of frameworks such as that posited by Cole and Tibby (2013) and models such as

USEM (Yorke and Knight, 2007) and CareerEDGE (Dacre Pool and Sewell, 2007) are examples of such developments (Cashian, 2007).

Delaney and Farren (2016) also categorise the discourse of graduate employability in terms of the position or approach in which it is viewed and suggests three contrasting theoretical perspectives:

- Mainstream approach
- Alternative position, also referred to as the critical account
- Processual

The study by Delaney and Farren (2016) is of particular interest given that it is based on part-time university graduates and their perceptions of graduate employment. Whilst the sample in this study comprised of former distance learning students, similarities can be drawn on some of the findings particularly in terms of motivations for study. The three detailed approaches identified by Delaney and Farren (2016) therefore potentially relate to all students regardless of mode of study. Based on this, the approaches are further considered alongside the systematic literature review on the conceptualisations of employability undertaken by Williams *et al.* (2016). The comprehensive review considers publications on employability between 1960 and 2014, of which three significant themes within the discourse of graduate employability are identified from sixteen eligible manuscripts. The themes *capital*, *career management* and *contextual* (Williams *et al.*, 2016) being the three theoretical perspectives. The following sections of this literature review therefore consider the approaches suggested by Delaney and Farren (2016) and the three key conceptualised themes defined by Williams *et al.* (2016).

2.4.1 Capital

In terms of capital being determined as a superordinate dimension, Williams *et al.* (2016, p. 887) defines this as:

“Anything an individual possesses that can be seen as leading to an increased probability of positive economic outcomes, or other personal outcomes relating to the

area of work. The core features of this dimension are properties of the individual that elicit demand or functionality in the workplace”.

Williams *et al.* (2016) refer to human capital being included within the superordinate term of capital, alongside social capital, cultural and psychological capital.

2.4.1.1 Human capital

Delaney and Farren (2016) refer to the positive link between HE and the labour market and indicate that those adopting this proposition are adopting a mainstream approach to the discourse of employability. This approach is also recognised by Tholen (2015, p. 759) who states the mainstream view depends on the idea that “*the labour market is made up of individual actors who independently respond to labour-market opportunities and incentives*”. A view, which Tholen (2015) expands on, calling for a relational approach to be considered to gain a better understanding of how students perceive the labour market based on their understandings and how they act within it.

Delaney and Farren (2016) break down this theoretical perspective further by referring to the human capital theory of Shultz (1971) and the connection between qualifications from HE, higher productivity and higher wages. The Skills Framework, an outcome of the Dearing Report in 1997 summarises the mainstream approach to graduate employability and encourages HEIs to promote knowledge and employability skills within the curriculum (Delaney and Farren, 2016). The mainstream approach thereby links employability to individual attributes (Delaney and Farren 2016). This link is firmly grounded within the theories of human capital as posited by both Becker (1962) and Schultz (1971) who claim that education increases the productivity of an individual, which will in turn enhance their job performance.

Cai (2013, p. 459) also supports this perspective and suggests education “*provides marketable skills and abilities relevant to job performance, and thus the more highly educated people are, the more successful they will be in labour markets in terms of both income and work opportunities*”. Delaney and Farren (2016, p. 195) provide support by further suggesting that human capital theory “*connects higher educational qualifications to higher productivity and higher wages*”. Both full and part-time

students may therefore recognise the value of education and financial reward and this could be a motivational factor to engage in HE. Based on this assumption, part-time students could perceive that undertaking part-time study could improve work opportunities within either their existing workplace or new career along with the potential to increase their income. This theoretical perspective appears equally relevant therefore for both full and part-time students, depending ultimately of course on their motivations to study. However, it is questionable how part-time students relate to this conceptualisation of human capital and its association with HE and employment, particularly when it features prominently within current conceptualisations of employability.

Becker (1962) relates human capital to the skills and information which an individual possesses, and training and education relates to the investment in this capital. Perciles Rospiglios *et al.* (2014, p. 420) state, “*human capital theory contends that HE contributes by adding to the potential productivity of graduate employees*”. Reference to the word “*potential*” is however, pertinent within this statement and based on this, human capital could relate to the opportunities it might offer to students but the actual gaining of a HE qualification does not guarantee employment.

Williams *et al.* (2016, p. 887) relate human capital to the dimension of employability in terms of adding “*functionality to the employer through an enhancement of the skills and knowledge available to them, e.g. knowledge of the latest techniques or software that could lead to economic gain for the company*”. However, can part-time students relate to this? It is debatable whether they perceive the link between education and career development. Employability from this dimension arguably suggests that the amount of human capital someone possesses allows them to compete for their desired job role, thus linking to the mainstream approach to employability as described by Delaney and Farren (2016). This places them in a favourable position in the job market and makes them more likely to secure better and well paid jobs whilst also making a contribution to the economy. However, this is based on the premise that possession of a degree credential actually differentiates a graduate in the job market and creates a rationale for study.

Within the theories surrounding human capital, the relationship between skills development and graduate employability are closely associated. Reference to skills commonly appearing in definitions surrounding employability such as that offered by Knight and York (2003, p. 3) who define graduate employability as “*a set of achievements – skills, understanding and personal attributes*”. Cottrell (2008) suggests skills are learned activities, which an individual develops through both practice and reflection. The Cambridge English Dictionary states a skill is “*an ability to do an activity or job well, especially because you have practised it*” whereas the Oxford Dictionary defines skill as “*the ability to do something well; expertise*”. The Business Dictionary expands further in its definition and suggests a skill is “*an ability and capacity acquired through deliberate, systematic and sustained effort to smoothly and adaptively carry out complex activities or job functions involving ideas (cognitive skills), things (technical skills) and /or people (interpersonal skills)*”. The definitions therefore associate the word skill with being able to do something well and linked to employment and being able to do a job. The definitions also suggest the acquisition of skills through practice and / or sustained effort. Reference to the attainment of skills could therefore be viewed from the perspective that skills are obtained through learning and practice, which could suggest that we do not have any skills until we actively engage and learn. However, if a part-time student is already working, a case could be made that they are already reasonably competent in terms of the possession of skills to fulfil their role but perhaps cannot progress without some form of formal qualification. Human capital dimensions of employability in terms of skills development may therefore not have the same meaning or significance for part-time learners in comparison to their full-time counterparts. Reference to skills does however feature heavily within the employability debate, particularly in terms of what employers seek in graduates. Callender and Little (2014, p. 253) identify that there is arguably a greater emphasis on “*which skills are needed in the workplace; the effectiveness of skills utilisation in the workplace and relationship of skills utilisation to productivity*”. The word skill is repeatedly used within this sentence and associated with workplace and productivity. This statement thereby suggesting that employers want a skilled workforce which in turn they can utilise to improve productivity. From this perspective, again human capital is considered critical both an individual level and organisation level within this concept. However, demand for graduates and a shift in the labour market could affect this further. Regardless of the

possession of the relevant skills for a particular job, the supply of suitable candidates might exceed demand.

A potential limitation of the human capital approach is the relevance of the conceptualisation for part-time students. It is therefore relevant to explore further, how a skills-based approach to employability relates to part-time students, particularly more mature learners. A study by the OECD (2012) of skills strategy acknowledges the needs for a skills-based approach. The study recognises that strategies surrounding employability generally focus on preparing young people to enter the labour market. It is however, not just school leavers but the existing workforce that should “*develop skills so that they can progress in their careers, meet the changing demands of the labour market, and don’t lose the skills they have already acquired*” (OECD, 2012, p. 9). This potentially links to the recent introduction of degree apprenticeships opportunities for employers to consider the training and development of its existing workforce. A study by Hughes and Saieva (2019) reinforces the opportunities degree apprenticeships and higher degree apprenticeships offer for career progression but recognise the diversification which can exist amongst the student base. The authors acknowledge that apprentices can include those already doing a job for some time but seeking validation through seeking a degree. This raises further questions about how such learners already based within organisations potentially relate to the human capital conceptualisation and is an area which is further explored within this study.

Baker and Henson (2010) also consider the use of the term employability skills and potential limitations of taking a key skills approach. Acknowledging the earlier theories of Knight and Yorke (2003) who refer to personal attributes within their definition of graduate employability, Baker and Henson (2010) suggest that employability should focus on graduate attributes. Whilst reference to attributes and knowledge are present within extant literature, employability skills appear more prominently. In a study undertaken in collaboration with business by the CBI (2009, p. 8), employability skills are said to include:

- Self-management
- Team working
- Business and customer awareness

- Problem solving
- Communication and literacy
- Application of numeracy
- Application of information technology
- Entrepreneurship / enterprise

It is therefore worthy to determine how part-time students relate to the employability skills put forward by the CBI (2009) particularly as they could claim that they possess some of these skills within their current role. Arguably, a full-time student could also claim possession of some of these skills due to previous work experience or part-time work. As recognised by Tainor in the CBI report (2009, p. 3) “*universities can help even students who already have extensive work experience to develop their skills further to make them more attractive to employers*”. Based on this theory, part-time students would be well placed to determine what they need to develop in order to progress within their existing or a new career and hence this further supports the purpose of the study to determine a model of employability which has more relevance to them.

Baker and Henson (2010, p. 63) have been critical of the role of universities in developing “*a highly skilled workforce*” in that they have “*been slow to take up this challenge*”. However, with frameworks such as that developed by Cole and Tibby (2013) on behalf of the HEA, it is argued that there has been significant advancement in the employability agenda in the last few years, which would suggest that the importance of HE and the economy is prominent. However, such advancements do not appear to extend to understanding the employability agenda from the perspective of part-time students and their potential contribution to the development of a highly skilled workforce.

The earlier work of Milne (2000, p. 87) suggests that whilst at university, students need to build on and strengthen their capabilities so that it is not just the initial acquisition of a job but also the development and maintaining of employment. This was highlighted in earlier research by Knight and York (2002) and Saunders and Machell (2000) that in order for this country to maintain an internationally renowned standing, HE needs to “*contribute directly to national economic regeneration and*

growth” through reducing the skills gaps between what employers expect and what a graduate provides. Part-time students may arguably already bridge some of the perceived gaps in terms of demonstrating the skills to undertake their current role. An employer might therefore recognise the benefits of investing in their current workforce to develop subject specific skills through HE as opposed to employing a new graduate from a taught programme who may have limited work experience. The introduction of degree apprenticeships also provide the opportunity for organisations to develop their existing workforce or new talent on the basis that the employees are working whilst also learning. Human capital therefore has relevance for part-time students but how they relate to it will differ depending on their individual motivations to study. The relationship between employability and the dimension of human capital will therefore be explored further in this study to determine if both a significant and positive relationship exists.

From a review of extant literature which considers the human capital dimensions of employability, it is evident that the focus is primarily on the perspectives of traditional modes of study on full-time programmes. This reinforces the purpose of this study to gain a better understanding of how part-time students relate to the concept of human capital. Part-time students who are currently employed could claim possession of skills, knowledge and attributes and will arguably already be able demonstrate a set of skills in the job they perform. On this basis, it could be argued that the human capital approach is a narrow-based conceptualisation of employability. This is in itself difficult to determine however, due to the diversity which exists amongst part-time students. Not all part-time students will be in employment or within a role of their choice and may be studying to develop skills for a career change or career development. The motivations for studying amongst part-time learners therefore differ as seen in research Bennion *et al.* (2011). This therefore highlights a potential gap within existing employability frameworks such as that developed by the HEA in terms of how the diverse needs of students within HE are accommodated. How do HEIs adopt such frameworks and toolkits to ensure they develop strategies which meet the expectations of their learners? This again supports the requirement to consider the relationship between part-time students and skills-based approach to employability.

2.4.1.2 Social capital

Okay-Somerville and Scholarios (2017) and Holmes (2013b) associate human capital with possession in terms of possessing skills whereas they refer to social capital as positional. In terms of government policy, Yorke and Knight (2008, p. 158) highlight that “*Governments around the world are concerned that higher education makes the greatest possible contribution to ‘human capital’, the quality of which is believed to be crucial to national well-being*”. This concept is however, controversial in that some would argue that HE does not make someone more employable and other factors including the actual institution studied at could have more influence than indeed the area of study (Holmes, 2013b). Baker (2000) adds a further dimension to the value of education and its association with human capital and suggests that success relates to engaging with the life-long learning process. Baker (2000, p. 7) further suggests that in order to benefit from the investment in education and learning, the development of: “*relationships with others; indeed, social capital facilitates the creation of human capital*”. Social capital referring to “*the resources available in and through personal and business networks. These resources include information, ideas, leads, business opportunities, financial capital, power and influence, emotional support, even goodwill, trust and cooperation*” (Baker, 2000, p.1). Based on this perspective, part-time students may have an advantage over their full-time counterparts in that they are able to utilise their social capital to develop their employability.

Social capital is defined by Williams *et al.* (2016, p. 889) as “*the additional value of existing relationships which can be utilised to enhance the economic capital of the company as a result of recruiting an individual*”, hence the social connections which could be utilised to improve functionality within the work environment. Tomlinson (2017, p. 342) links social capital to the “*sum of social relationships and networks that help mobilise graduates’ existing human capital through developing bridging ties with other key social actors*”. This conceptualisation is also being associated with the mainstream approach put forward by Delaney and Farren (2014), particularly by bridging the ties between social and human capital.

Based on the concept of social capital, an individual could therefore be appointed within an organisation not so much based on what they know but more on whom they

know. This relates to the previously empirically tested work of Arthur, Claman and Defillippi (1995), Fugate Kinicki and Ashforth (2004) and Williams *et al.* (2016). Tomlinson (2017, p. 342) reinforces this suggesting, “*the more points of social connection individuals are able to establish, from diverse and knowledge-enriching sources, the more knowledgeable and trusting they may become towards areas of social or economic life to which they may have been less familiar*”. Social capital is therefore associated with the development of opportunities to network to build social capital, particularly for students from lower socio-economic backgrounds (Tomlinson, 2017). Initiatives such as work experience and placement opportunities is one potential area to enhance such opportunities to build networks and social capital. However, such initiatives will arguably have more relevance for full-time students who may have limited work experience and potentially less contacts whereas part-time students may have more opportunities to exploit existing networks based on their current employment and potential connections. Therefore, it is pertinent to consider how part-time students relate to the concept of social capital. Again, this is potentially more complex to define for part-time learners compared with full-time students due to the diverse nature of the part-time learners. The differing motivations to study and cultural factors associated with part-time students could potentially impact on this dimension due to its close association with prior and current experiences.

2.4.1.3 Cultural capital

Both Tomlinson (2017) and Williams *et al.* (2016) refer to Bourdieu’s (1984, 1986 and 2008) concept of cultural capital. Williams *et al.* (2016, p.889) suggest this relates to “*situations which the individual has experienced that are perceived as enhancing the properties of the individual, which lead to functionality in the workplace*”. This therefore relates to how potential employees fit with the culture of the organisation particularly in terms of customs, behaviours and ideas (Williams *et al.*, 2016). Based on these suggestions, through improving the fit between the employee and employer, the employee will be more motivated to meet the expectations of the employer and “*strive for goals and to thus enhance an individual’s employability*” (Williams *et al.*, 2016, p. 889). For part-time students looking to develop within their current place of employment, this form of capital could be particularly relevant. In this regard, it is of potential value to determine how

part-time students relate to this conceptualisation and determine within this context whether there is a close association with social capital.

There is also potential for discriminatory factors, which could have a negative influence on cultural capital as previously acknowledged by McQuaid and Lindsay (2005). Whilst legislation should protect against discrimination, it does not cover all aspects associated with the recruitment process such as *“fitting in”* and *“social compatibility”* (Williams *et al.*, 2016, p. 890). This links to values and expectations of both the employer and employee and as such relates to the balance of fit (Van der Heijde and Van der Heijden, 2006).

Higdon (2016) identifies financial capital alongside social and cultural capital as being the discourse to employability, rejecting the influences of a skill-based approach and human capital theory. This is an approach which Higdon (2016) suggests is predominantly a government led model of employability, formed on the premise of the wants of employers when employing graduates. Higdon (2016, p. 177) suggests there is lack of research into the perspectives of students and the *“authentic student voice”* and argues *“many careers are not about accessing skills acquisition, but are more about accessing the inner circles within the industry and gaining access to the gatekeepers of potential work opportunities”*. The programme of study is also a consideration according to Higdon (2016) who also claims that financial capital is required in order to access creative careers such as architecture, fashion and arts-based programmes. This has been associated with the need to take unpaid internships in order to gain some experience and build social capital. The study by Higdon (2016, p. 179) highlights that a *“lack of personal industry contacts and money as being the main obstacles to accessing and sustaining creative employment”*. This therefore raises a further discourse within the conceptualisation of employability in terms of how the perspectives could differ depending on the actual programme. The study by Higdon (2016) was based on undergraduate students but the actual modes of study are not identified. Therefore, whilst providing a contrasting view to human capital theories, the full extent of this conceptualisation is not clear in terms of how part-time students on both undergraduate and postgraduate taught programmes view this and if such differences do exist between programmes of study as well as mode of study. The study by Higdon in 2016 and the more recent

contribution in 2018, does however support the call for more research from the student perspective with a greater emphasis on the social, cultural and financial capital dimensions of employability. Again, this study aims to add a contribution to the debate.

2.4.1.4 Psychological capital

Building on the earlier work of Luthans (2002) which considered positive psychology and organisational behaviour, Williams *et al.* (2016) acknowledges psychological capital within their review. Luthans (2002, p. 59) identifies this form of capital as the “*positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace*”. This relates to an employee’s ability to display strengths such as motivation, attitudes and personality (Luthans, 2002) and terms such as “*flexibility*”, “*adaptability*” and “*self-efficacy*” (Tomlinson, 2017). Personal motivation developed by de Grip, van Loo and Sanders (2004) within this conceptualisation of employability includes assessment of the individual to be able to adapt within a role through the willingness to train and to be mobile within the job role whilst also demonstrating a willingness to engage with functional flexibility. Williams *et al.* (2016) also draw on the term self-efficacy as presented in the CareerEDGE Model by Dacre Poole and Sewell (2007), highlighting the importance psychological capital has when seeking employability. It is however evident that this conceptualisation will be particularly relevant for part-time students who may actually be engaging with part-time study to support their adaptability and demonstrate their commitment to engage with further training and development. This form of capital will also have relevance to part-time students who are perhaps seeking new or alternative employment, therefore again, depending on the motivations for study. This strand of capital could therefore have different meanings and relevance to individual learners in their career preparedness and is again worthy of further investigation.

2.4.2 Career Management

Further to the dimension of capital and its associated sub dimensions being one key area of employability, Williams *et al.* (2016, p. 892) also acknowledges career management as a further dimension within the conceptualisations. This relates to the consideration of employability “*in terms of competencies and skills beyond*

performance in a set job role, as well as the role of career goals / orientations in outlining an individual's desired employment". This dimension is arguably more relevant for part-time students due its association with career development and reference to an *"individual's desired employment"*. Therefore, regardless of whether a part-time student is looking to change employment or develop within their current career, it is possible that such learners resonate more closely with the term career management as opposed to the dimensions of capital.

Building on the work of Haines, Scott and Lincoln (2003), Watts (1998) and Webster, Wooden and Marks (2004), career management is recognised by Bridgstock (2009, p. 35) who relates it to *"the ability to build a career; to intentionally manage the interaction of work, learning and other aspects of the individual's life throughout the lifespan"*. The Career Management model by Bridgstock (2009) represents the output of further research within this field. Career management therefore relates to the creation of *"realistic and personally meaningful career goals, identifying and engaging in strategic work decisions and learning opportunities, recognising work/life balance and appreciating the broader relationships between work, the economy and society"* (Bridgstock, 2009, p. 36). This concept could be particularly pertinent for part-time students as they seek opportunities and identify their particular individual goals.

Williams *et al.* (2016) relates career management to the process of how an individual makes best use of training and employment opportunities to achieve their career goals. Williams *et al.* (2016) identify from their comprehensive literature review, self-management and signal management as two sub-dimensions associated within career management literature.

2.4.2.1 *Self-management Skills*

Jackson (2017, p. 834) suggests *"career self-management is widely considered critical to graduate employability and fostering skills in professional networking: labour market awareness and job search strategies are inherent to university support services and/or curricular content"*. This links to the earlier definition by Bridgstock (2009, p. 37) who relates self-management skills to the *"individual's perception and appraisal of themselves in terms of values, abilities, interests and goals"*. Bridgstock

(2009) associates this with career identity, which also relates to the processual theories of Holmes (2013) in that employability develops over time and through the individual or their journey interacting with others. Williams *et al.* (2016) further acknowledges the connection between self-management and career identity particularly in terms of how it can contribute through an individual’s capacity to be able to appraise their own values and abilities and how they relate to the working environment. As demonstrated by Williams *et al.* (2016, p. 984), this “relates to the achievement of ‘personal goals’ and ‘employee career satisfaction’ through the matching of these goals with available opportunities”.

Tomlinson (2017) also refers to identity and links it to a form of graduate capital, essentially adding another dimension to the original conceptualisation determined by Williams *et al.* (2016). Identity capital is explained by Tomlinson (2017, p. 345) as “the level of personal investment a graduate makes towards the development of their future career and employability” and the utilisation of their experiences to formulate a personal narrative which can be used to pursue their chosen employment field. This relates to a student’s self-development and self-concepts and career management literature as well as psycho-social dimensions (Tomlinson, 2017). Figure 2.4 illustrates the graduate capital model.

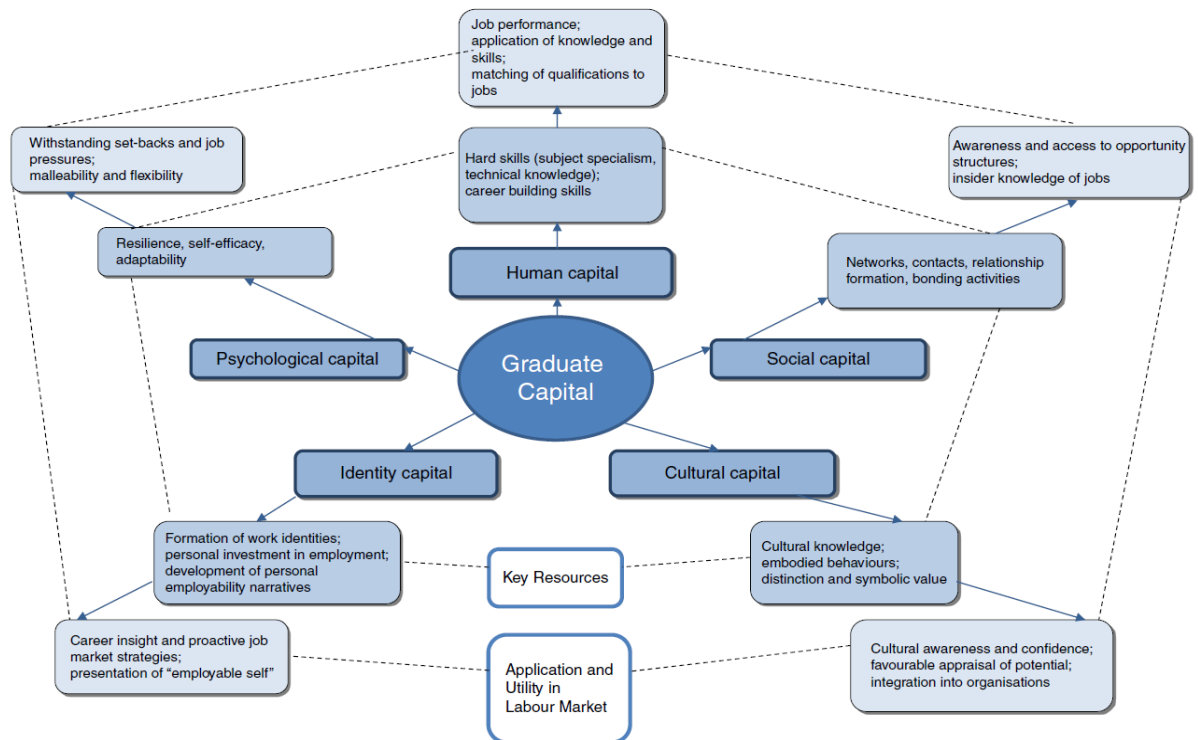


Figure 2.4 (Tomlinson 2017, p. 340) Graduate Capital Model

As indicated by its particular absence within Figure 2.4 financial capital as suggested by Higdon (2016) is not featured with this framework. The conceptualisations presented by Williams *et al.* (2016) do however, align in terms of superordinate dimension of capital with identity capital discussed within the context of career management. Reference to the term identity capital is therefore arguably closely associated with both the dimensions of capital and career management. In terms of the theoretical perspectives suggested by Delaney and Farren (2016), identity capital essentially moves away from the mainstream approach to employability and aligns more closely to a processual approach. Holmes (2013 p. 548) offers an insight into the processual approach suggesting: “*graduate employability is not something that exists at one point in time. Rather employability is something which takes place over time and interaction with others*”. This appears to align with the dimension of career management and relates to an individual being able to navigate their career development. Delaney and Farren (2016) suggest that Holmes is critical of both the mainstream and alternative approaches to employability in that the former focuses primarily on the actual acquisition of employment in terms of possession and the alternative approach arguably causes despair and posits that elite positions will go to elite people based on their cultural capital. Holmes (2013) therefore puts forward the debate that employability is a process, which relates to graduate identity.

Holmes (2001 and 2013) and Hinchliffe and Jolly (2011) argue that enhancing the employability of a student is not just about acquiring skills and attributes such as those defined in the list by CBI (2009), but it is also about the development of the individual student’s unique graduate identity. Hinchliffe and Jolly (2011, p. 580) further suggest that students should be given the opportunity to develop experiences to complement skills associated with employability. They categorise these experiences as:

- Values – personal ethical values and social awareness
- Intellect – covering capabilities such as the ability to think critically, analyse and communicate information, and challenge and bring new ideas
- Performance – the application of skills and intellect in the workplace
- Engagement – the willingness to meet personal, employment and social challenges head on

Jackson (2016) further contributes to this, suggesting that characteristics such as confidence and knowledge of the discipline contribute to graduate identity. This form of capital could therefore be particularly relevant for part-time students as they negotiate their identity within either their current employment or desired employment area. Personal values and self-development could therefore be instrumental in helping determine how part-time students construct their personal experiences and graduate identity.

Reference to both identity capital (Tomlinson, 2017) and graduate identity (Holmes, 2013) feature within extant conceptualisations of employability and the dimensions of capital and career management (Williams *et al.*, 2016). Whilst there appears to be a close association between the two dimensions, based on the work of Tomlinson (2017) and recognition of identity as a form of capital, the significance of these constructs for part-time students is unclear. Arguably though, identity capital is particularly relevant for part-time students in terms of how they appraise their goals, how satisfied they currently are and what opportunities exist. Williams *et al.* (2016) relate this to the term of deployment as presented in the earlier conceptualisations of employability put forward by Hillage and Pollard (1998). Deployment is associated with the term of self-awareness and how an individual perceives their capital and how they can make best use of it. This therefore links identity capital to the career management theoretical perspective and self-management and self-concept particularly in terms of self-awareness. Dacre Pool and Sewell, (2007) consider self-concepts within their CareerEDGE model, particularly in terms of reflection and evaluation and the development of self-esteem, confidence and efficacy.

Williams *et al.* (2016, p. 894) suggest career identity “*informs acceptable career goals and means of achieving these goals, based on an individual’s interests, values and motives, the present self-management dimension expands upon this to include the importance of accurately appraising one’s abilities and values*”. The authors therefore recognising the support for “*the role of career identity in understanding employability*” (2015, p. 896) within existing literature and suggest it may be beneficial for career management and orientation models to be further explored.

2.4.2.2 *Signal Management – Signalling Theory*

A further theory within the career management review by Williams *et al.* (2016) relates to signalling theory. Developed by Spence (1973), signalling theory also builds on the capital dimensions of employability. However, within this theory, the focus is on the signals an individual displays in terms of their personal attributes and how prospective employers perceive such signals (Williams *et al.*, 2016). Delaney and Farren (2016) acknowledge signalling theory as being associated with the mainstream approach to employability, linking it to the selection of employees based on the credentials of their education and signals the potential for a better return on their investment in labour. Percicles Rospigliosi *et al.* (2014, p. 420) contend that it “*asserts that HE contributes by enabling employers to differentiate potentially productive graduate employees*”.

Forrier and Sels (2003) refer to the use of signalling theory in determining which individual abilities a potential employee can offer. The literature is again referring to potential employees, but how do existing employees relate to this concept if they are not looking to change employer but are engaging in part-time study to specifically progress within their current place of employment? How can they make best use of the signals they display to demonstrate the development of their abilities and attributes? Williams *et al.* (2016), referring to the earlier work of Hillage and Pollard (1998) relate signalling theory to the ability to articulate the assets such as the capital dimensions. The CareerEDGE model presented by Dacre Pool and Sewell (2007) is also associated with signalling theory within the review by Williams *et al.* (2016) in terms of career development learning. Reference is also made to Bridgstock (2009) and career building skills. The perspective presented in the review by Williams *et al.* (2016) does however appear more applicable towards seeking employment and as such it is questionable whether this theory is equally relevant to those individuals already working but seeking to maintain or enhance their employability within their current organisation. It is therefore relevant to assess if part-time students relate positively to signalling theory, as arguably they may be able to appreciate the potential impact this can have on their career development. If seeking work, this theory might present more positively than those seeking to maintain their current employment might. The motivations for study could thereby influence the relationship with signalling theory.

Whilst the signalling theory can be associated with adapting a more mainstream approach as depicted by Delaney and Farren (2016), self-management theories appear to relate more closely to the processual approach. However, as career identity could be considered within the terminology of graduate capital, the boundaries between processual and the mainstream approach become a little blurred. This could indicate that employability should consider both perspectives of the processual and mainstream approaches.

2.4.3 Motivations to Study

The context in which a student is motivated to engage in HE is potentially an influencing factor within current conceptualisations. Williams *et al.* (2016) identified *context*, which relates to the economy and demand as the third dimension of employability within their review. Within this dimension, Williams *et al.* (2016) suggest that employability considers external circumstances, which can have some bearing on the capital required of an individual and “*relates to the fit between the individual and the employer’s current requirements compared to the fit of other individuals applying for this role*” (Williams *et al.*, 2016, p. 896).

Williams *et al.* (2016) extend this further and refer to positional conflict theory as identified in the work of Brown, Hesketh and Williams (2003) and acknowledge this as being of significance in the theoretical development of employability. Reference to employability may be considered in “*terms of a justification for unequal opportunities*”. (Williams *et al.*, 2016, p.896). This conceptualisation therefore essentially relates to the alternative approach as determined in the study by Delaney and Farren (2016). Within this approach, consideration is given to conflict theories and the work of Brown and Hesketh (2004) in that employability is a result of opportunities and inequality within frameworks. Therefore, the alternative position, also referred to as critical account, forms a different perspective than that offered by both the mainstream and processual approaches. Brown and Hesketh (2014) suggest opportunity and inequality influences employability as opposed to it being determined solely by human capital. A critical realist perspective suggests that as HE expanded, neoliberal policies have created differences between institutions and contributed to the inequalities that they should have eliminated (Tomlinson, 2017).

Based on further research by Boden and Nedeva (2010), Delaney and Farren (2016) imply that employability can be socially constructed and as such cannot be easily defined. This creates a further challenge for HE providers in terms of how they develop strategies to enhance career opportunities for students whilst also meeting the expectations of employers and government policies.

A further consideration within this dimension relates to personal factors as recognised by Williams *et al.* (2016). Hillage and Pollard (1998, p. 897) identify “*caring responsibilities, disabilities, and household status*” as potential circumstances which could have an influence on an individual’s ability to “*navigate the labour market*”. This represents a potential issue for part-time students who often experience barriers to study due to their personal circumstances (Butcher, 2015). Harvey (2001) identifies social class, ethnicity, age and gender as potential mediating factors to the employment process.

As identified by Forrier and Sels (2003), employability can also be considered in terms of how an individual deals with job insecurity. Based on this perspective, employability relates to those who may be employed and looking for alternative work along with those who are unemployed. This therefore has the potential to encompass a wide range of individuals who have differing motivations for developing their employability, even those who are currently employed. This relates to the work of Layer, (2004, p. 11) who identified that: “*the possibility of securing a ‘job for life’ with the same employer is increasingly unlikely, emphasis needs to be given to new kinds of career pathways, reflecting on only the greater diversity of the student population, but also the greater volatility of the labour market*”. This again relates to contextual issues due to a potential change in culture in the labour market and how an individual chooses to construct their career path. This links to the demands and expectations of those in the labour market and motivational factors to study. Generational differences could also influence the motivation for study.

Change within an organisation could also be an influencing factor in terms of how an employee perceives their employability whereby an individual’s inability to cope with organisational change could have a detrimental impact on both the individual and organisation. In terms of the individual, organisational change could lessen job

satisfaction, impact on health and well-being and lower an individual's overall performance and commitment to the organisation, thereby having a negative impact on an organisation. To gain a better understanding of the determinants of "*perceived employability*" from an employee perspective, Wittekind, Raeder and Grote (2010, p. 566) undertook a longitudinal study and identified: "*education, support for career and skill development, current level of job-relating skills, and willingness to change jobs*" as "*significant predictors of perceived employability*". Contrary to this, the study also identified that "*willingness to develop new competencies, opportunity awareness, and self-presentation skill failed to predict perceived employability*" (Wittekind *et al.*, 2010, p. 566).

De Grip *et al.* (2004) suggest, employability needs to consider both contextual and individual factors, which could include both the organisational culture and individual perceived employability. However, within the remit of this study, the primary focus will be on individual factors associated within both a mainstream and processual approach as defined by Delaney and Farren (2016). Based on the work of Boden and Nedeva, (2010), Delaney and Farren (2014, p. 196) summarise "*the alternative discourse contends that it is difficult to define employability because it is, in fact, socially constructed*". Whilst Boden and Nedeva (2010) offer this perspective, it is evident from extant literature that employability remains a key indicator for HE providers, employers, students and graduates. Therefore, whilst attempting to establish a definition of employability is complex, the overall conceptualisation of employability is being explored in terms of how its dimensions contribute to the career development of part-time students and this will be determined from both a mainstream and processual approach. This will consider the individual perspectives, although to gain a better understanding of the broader picture, it is beneficial to also consider this within the context of both organisational, educational and governmental perspectives. The alternative approach and consideration of contextual factors in terms of neoliberal policies are therefore considered to be outside the scope of this study. The motivations to study in terms of self-perceived employability are however considered highly relevant, due to the positive association between education and perceived employability based on the work by Wittekind *et al.* (2010).

Table 2.2 below summarises the key dimensions from the work of Williams *et al.* (2016) and Tomlinson (2017) and captures the main definitions as cited in recent research and studies.

Dimensions	Conceptualisations – key words	Cited By
<u>Capital</u>		
Human capital	<p>“Information and skills that the individual possesses that are perceived as contributing to the production process”</p> <p>“knowing how” = formal and experiential learning</p> <p>Hillage and Pollard – subdivide this into 3 categories; Baseline Assets (basic skills and essential personal attributes) Intermediate Assets (occupational specific skills, general key skills and key personal attributes); High skills – skills that help contribute to organisational performance</p> <p>Eby, Butts and Lockwood relate this to enhancing perceived career satisfaction.</p> <p>Linked to perceived career satisfaction</p> <p>Related to internal and external marketability</p>	<p>Becker (1962)</p> <p>Arthur, Claman and DeFillippi (1995)</p> <p>Eby, Butts and Lockwood (2003)</p> <p>Hillage and Pollard (1998)</p> <p>Knight and Yorke (2003)</p> <p>Dacre-Pool and Sewell (2007)</p> <p>Van Der Heijde and Van Der Heijden</p>
Social capital	<p>Social obligations / connections which can be converted to economic capital</p> <p>“employability is the degree to which the potential employee possesses social connections that can be utilised to enhance their functionality in the workplace”</p>	<p>Bourdieu (2008)</p> <p>Arthur, Claman and DeFillippi (1995)</p> <p>Fugate, Kinicki and Ashforth</p> <p>Eby, Butts and Lockwood</p> <p>Van Der Heijden (2006)</p>
Psychological capital	<p>“positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace’ (Luthans 2002, p. 59 – includes states such as confidence, hope, resilience, positive self-evaluation and personality traits such as conscientiousness” (Williams et al)</p> <p>Question – potential link to self-awareness and EI</p> <p>Very much based on individual performance</p> <p>Links to adaptability – personal adaptability based on optimism, propensity to learn, openness, internal locus of control and generalised self-efficacy</p> <p>Personal flexibility to change based on a situation forced upon them ie) resilience</p> <p>Personal motivation to adapt – willingness to engage in training, be mobile and functional flexibility (De Grip, van Loo and Sanders)</p> <p>Self-efficacy (Dacre-Pool and Sewell 2007 and Knight and Yorke)</p> <p>Openness (Bridgstock 2009)</p> <p>Ambition (Hogan, Chamorro-Premuzic and Kaiser 2013)</p> <p>Ambition work ethic and drive</p>	<p>Luthans</p> <p>Fugate Kinicki and Ashforth (2004) – adaptability</p> <p>Van Der Heijden (2006) – personal flexibility</p> <p>De Grip, van Loo and Sanders (2004)</p> <p>Briscoe and Hall</p> <p>De Vos and Soens</p> <p>Judge and Bono</p> <p>Bandura 1997</p> <p>McArdle et al 2007 Nauta 2009</p>
Cultural capital	<p>“refers to situations which the individual has experienced that are perceived as enhancing the properties of the individual, which lead to functionality in the workplace”</p> <p>Williams et al (2016, p. 889) referring to the work of Bourdieu “this capital can also be converted into economic capital when needed”</p> <p>Cultural capital therefore links to the “impact of fit between the employer’s ideas, customs and social behaviours and those of potential employees. Enhanced similarity, or fit, provides increasing motivation to engage in the company’s expected work practices, to strive for company goals and to thus enhance an individual’s employability”</p> <p>Further links to value of a degree, labour market? link to self-management</p> <p>Career Related networks and contacts</p>	<p>Bourdieu 2008</p> <p>Dacre-Pool and Sewell 2007</p> <p>Harvey, Locke and Morey 2002</p> <p>Forrier and Sels 2003</p> <p>Van Der Heijde and Van Der Heijden</p>

	Balance between the expectations and values of both the organisation and individual Social compatibility	
Graduate capital	“the level of personal investment a graduate makes towards the development of their future career and employability” Tomlinson (2017, p. 345)	Tomlinson (2017)
<u>Career Management</u>	“involves creating realistic and personally meaningful career goals, identifying and engaging in strategic work decisions and learning opportunities, recognising work/life balance and appreciating the broader relationships between work, the economy and society” Bridgstock (2009, p. 36)	Bridgstock (2009)
Signal Management	Recruitment and selection – job matching – effectively presenting signals, articulating assets, job seeking, career development learning, career building, cooperate sense – networking (formal / informal) Links to cultural capital in terms of providing signals of qualifications, possessions / common ways of thinking. (relates to Bridgstock and Dacre-Pool and Sewells Model)	Forrier & Sels (2003) Hillage & Pollard (1998) Harvey, Locke and Morey (2002) McQuaid and Lindsay (2005) Dacre-Pool and Sewell (2007) Van Der Heigde and Van Der Heigden (2006) Bridgstock (2009)
Self-Management	“individuals’ perception and appraisal of themselves in terms of values, abilities, interests and goals” Ie) consider values, abilities and goal setting theory within this section. Also links to career identity (Williams et al) “the core features of this dimension are elements of an individual’s feelings or values influencing how they relate to the working world. This in turn influences which opportunities presented in the context are purposed, and what actions to develop or apply capital (and thus develop present ‘signals’) the individual is motivated to engage in. Deployment of signals (Hillage and Pollard) Metacognition Self-reflection / awareness	Bridgstock (2009) William et al Hillage and Pollard (1998) Dacre-Pool and Swell Harvey Locke and Morey Knight and Yorke
<u>Contextual</u>		
	“surrounding events and systems that make up each individual employment opportunity” core features of this dimension are external circumstances that influence the capital demanded of an individual” “fit between the individual and employers’ current requirements compared to the fit of other individuals applying” Williams et al Individual’s mobility, training and functional flexibility Personal circumstances – caring, disabilities, household status “the nature of this dimension supports the statement by Cremin (2009) that there can be no formal or static definition of employability as individuals active within a competitive job market context strive constantly to keep ahead of others, and thus employability is a ‘condition that can never be fulfilled’. Employability levels fluctuate with capital demand, wherein employers may be regarded as occupying a stronger bargaining position, and lower thresholds for employment in circumstances of over demand Gonzalez et al – (2017) “among the contextual factor, the labour market (of a social nature) and the university faculty and teaching staff (or an organizational nature) are included.	Brown, Hesketh and Williams (2003) – positional conflict theory – justification for unequal opportunities. De Grip, van Loo and Sanders (2004) Hillage and Pollard McQuaid and Lindsay Thijssen Van der Heihden and Rocco

Table 2.2 – Conceptualisations and dimensions of employability based on the work of Williams *et al.* (2016) and Tomlinson (2017)

2.5 Models of Employability

Dacre Pool *et al.* (2014, p. 304) acknowledge that despite the concept of graduate employability receiving a great deal of attention within HE, “*there is limited empirical research that tests the available theoretical models or explores how university students perceive their employability development*”. They further suggest: “*this could partly be attributed to a lack of valid diagnostic tools or measurement instruments appropriate for this purpose*”. This study therefore offers a valid measurement tool to contribute to empirical research.

Whilst employability is generally measured in terms of the annual DHLE survey, this does not take into account factors such as future progression. Dacre Pool *et al.* (2014, p. 304) suggest, “*a more useful endeavour in the measurement of employability is the development of diagnostic tools that enable students to engage with the idea of employability and reflect on their strengths and weaknesses in relation to these skills, understandings and attributes*”. Yorke and Knight (2007) agree that constructing questionnaires that prompt students to reflect on their employability, take action to enhance it and consider how to articulate their strengths is a feasible undertaking. Such tools might also help with the design, implementation and evaluation of employability development interventions within educational curricula. Measuring students’ self-perceptions of employability is likely to be the most effective way of approaching this task.

Knight and Yorke (2003, p. 2) recognise that due to the complex nature of employability that “*no single, ideal, prescription for the embedding of employability can be provided. Embedding has to be undertaken with reference to the curricular context*”. Based on this argument, the context of part-time students and the relevance of employability and design of the curriculum for such learners needs be considered based on their requirements. Due to the potential differences in motivations for study which could exist amongst part-time students, this study posits that HE providers should develop their employability strategies to ensure that they are flexible to meet the differing requirements between both modes and programmes of study.

Although the purpose of this study is not to design a diagnostic tool for part-time students, it does intend to consider further how current approaches and methods relate

to part-time students and to offer a model which is empirically tested in order to guide further HE curriculum and strategies.

In response to the Teaching and Learning Summit on Employability in 2012, Cole and Tibby (2013, p. 4) developed a framework to assist HEIs to review and reflect on their current processes and to develop an action plan and approach to embedding employability within the curriculum. The framework offered by Cole and Tibby (2013) identifies a number of models which can be considered by HEIs when developing their strategies for enhancing employability. This section of the thesis will therefore consider some of the existing key models identified in the framework presented by Cole and Tibby (2013). The various models and measures of employability also take in account the context of study by Williams *et al.* (2016) and their systematic review of employability. The more recent study by Tomlinson (2017) has also been considered within this context to map antecedents of graduate capital to graduate employability.

2.5.1 USEM – Knight and Yorke (2003)

The USEM model developed by Knight and Yorke (2004) suggests a framework for embedding employability within the curriculum whilst also acknowledging the demands of stakeholders such as students and employers to be taken into account (Cole and Tibby, 2013).

Developed from an analysis of employability and its association with learning, Knight and Yorke (2003, p. 8) view employability as “*the confluence of understanding, subject-specific and generic social practices (or skills), metacognition (reflection or strategic thinking)*”. The USEM model of curriculum therefore referring to “*Understanding, Skills, Efficacy beliefs (self-theories) and Metacognition*” (Knight and Yorke, 2003, p. 8). This model is largely influenced by the Skills Plus project which the authors were involved with and the basis on which student employability is identified as a curriculum goal.

Yorke and Knight (2007, p. 158) later explain that how HEIs respond to their employability agenda varies amongst institutions with some doubting the “*validity of human capital theories*” and contrasting opinions placing “*greater explanatory*

weight on structural features of national economies and cultures". More recently, Knight and Yorke (2014, p. 37) clarify that the USEM model was devised "*in an attempt to put thinking about employability on a more scientific basis, partly because of the need to appeal to academic staff on their own terms by referring to research evidence and theory*".

Based on informed evidence determined from what "*employers claim to be seeking when hiring new graduates, as well as by research into human learning, self-theories, efficacy beliefs, metacognition, practical intelligence and student attainments*" Yorke and Knight (2007, p. 158) favour an approach which looks at these attainments.

Figure 2.5 illustrates the four attainments of the USEM model.

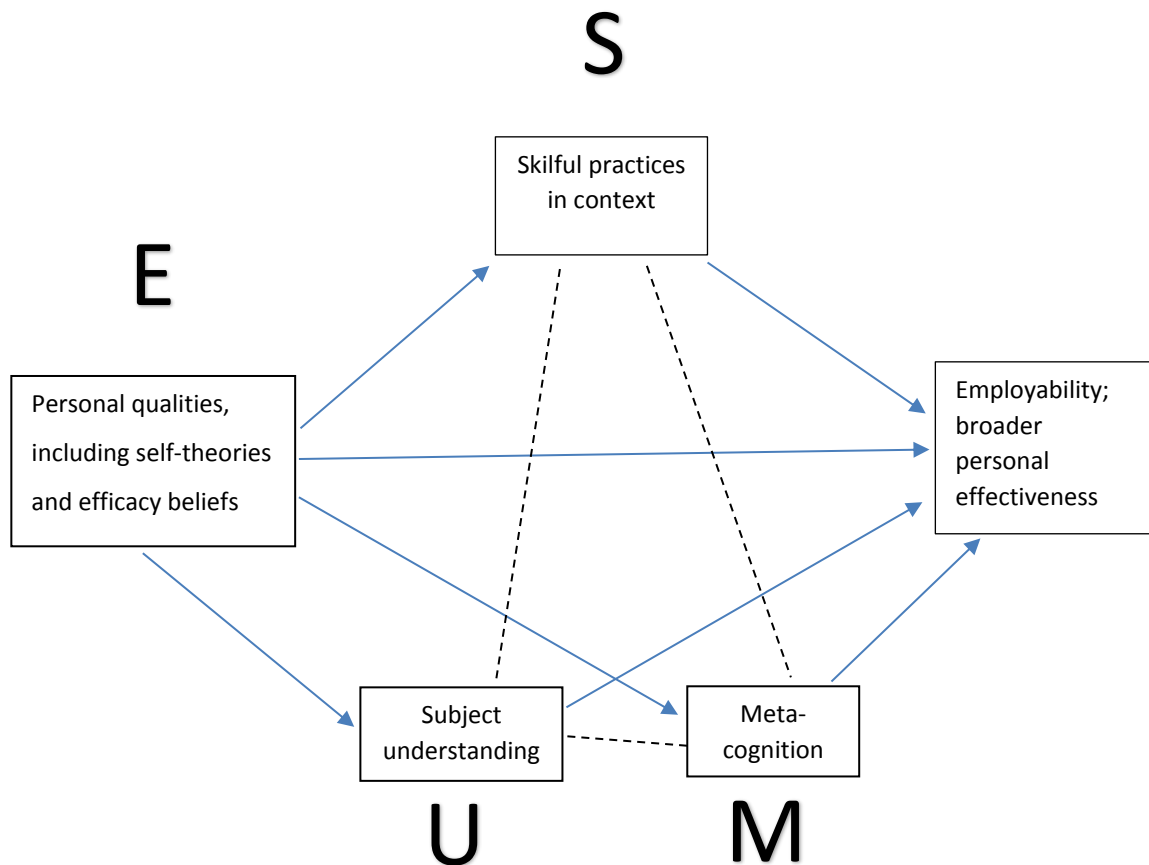


Figure 2.5 USEM Model of Employability as developed by Knight and Yorke (2003).

The first attainment *understanding* relates to disciplinary subject matter along with an understanding of how organisations work (Cole and Tibby, 2013). This attainment also relates to the demonstration and evidence of being able to obtain a good first

degree (Yorke and Knight, 2007). This attainment can therefore relate to all modes of study and it could be assumed that part-time students are equally keen to secure a good degree as full-time traditional students.

The attainment of understanding potentially links to human capital theory in terms of skills and knowledge developed through the curriculum and relates to Becker's (1962) earlier theories surrounding the investment in education and training. This further links to organisational understanding in the form of being able to identify which skills will be required in the workplace (Callendar and Little, 2014). Therefore, understanding links with the second attainment of *skilful practices in context*, which Cole and Tibby (2013) relate to academic, employment and life in general. In Pedagogy for Employability published by the HEA as part of their Learning and Employability Series (2004, p. 8), this construct relates to "*whether the practices are discipline-related or more generic*". This is based on utilising the model to examine how the curriculum is developed and taught. Therefore, in terms of considering curriculum design and the development, the HEA recognise the USEM model as a useful framework and provide an example exercise which could be adopted to review how each module maps to USEM in terms of offering a broad picture. From this, programmes can be cross-referenced with earlier research presented by Yorke and Knight (2004) which consider aspects of employability.

Skilful practices in context relate to both general and subject specific skills and the ability to "*use them appropriately in context*" (Yorke and Knight, 2007, p. 158). Again, this relates to all students regardless of mode of study although a part-time student could perceive they already have some of the skills, specifically subject based, if currently employed in their subject specific area. In terms of general skills, a part-time student could potentially view that they also possess such skills and neither they nor their employer may be able to see the value of a skills approach to employability. However, due to the diverse nature of part-time students and depending on the mode and programme of study, the development of skills associated with the working environment could be an influencing factor in the decision to engage with HE. An example of this is degree apprenticeship students who may be entering employment alongside starting a degree. School leavers will potentially have different skills to perhaps an existing employee who is competent within their role but

taking the opportunity to engage with HE through the apprenticeship tax levy. HEIs are therefore effectively tasked with the challenge of developing a curriculum which reflects the potential differences in the profile of their students and how the construct of employability should be developed for different modes of study.

Personal qualities, in particular *efficacy beliefs* create the third attainment and this appears closely related to the fourth attainment of *metacognition* which comprises personal reflection and strategic thinking (Knight and Yorke, 2003). Later research by Yorke and Knight (2007, p. 160) expands on the attainments of “*personal qualities*” suggesting they “*pervade employability*” and this relates to both “*an appropriate personal manner*” along with being “*influential in both the acquisition of subject understanding and the development of skills*”. Yorke and Knight (2007) claim pedagogic practices can therefore be enhanced when personal qualities, efficacy beliefs and self-theories are evaluated. Self-efficacy referring to being able to “*make a difference in situations through persistence and strategic thinking*” (Yorke and Knight, 2007, p. 160). Based on the USEM perspective (Knight and Yorke, 2003), HEIs therefore need to review how efficacy beliefs can be evaluated. One method to undertake this could be through the adoption of the Self Efficacy Questionnaire (SEQ) and Employability Experience Questionnaire (EEQ) which were later developed by Yorke and Knight (2007). The aim of the questionnaires is to assist both students and HEIs in their decision making and form the basis of developing awareness of self-theories (Yorke and Knight, 2007). The SEQ is generally tutor led and “*designed to enable teachers to gain a broad appreciation of the general disposition of the students in their classes*” (Yorke and Knight, 2007, p. 160) although providing feedback can be provided on the scores, it can also be utilised by students. The EEQ is, however focussed at students and completed to obtain their perceptions, the findings of which can be used to support the creation of a personal development plan and claims to employability. The EEQ therefore offers a potential tool for an individual learner to evaluate their employability and areas for development. However, despite the development of the USEM model (Knight and Yorke, 2003) and the EEQ questionnaire (Yorke and Knight, 2007), it is acknowledged by Yorke and Knight (2007, p.168) that, “*employability cannot be measured, although valid, learning-oriented data can be collected via the questionnaire*”. The authors clarify that it is the “*learning-oriented*” data, which is

beneficial for students and their educational advisors. The study by Yorke and Knight (2007, p. 168) appears to suggest that the model and questionnaires can be used to inform student employability but that the curriculum development should be based on “*professional judgement*” at a local level. Therefore, the EEQ (Yorke and Knight, 2007, p. 160) is a tool to assist individual students when “*making claims for their employability*”.

The EEQ and SEQ (Yorke and Knight, 2007) questionnaires whilst informed from the USEM model (Knight and Yorke, 2003) do not appear to be intended as instruments to assist in the decision-making for the development of student employability within pedagogic practices (Yorke and Knight, 2007). Some of the questions within the EEQ such as “*I have become skilful in my subject specialism*” (Yorke and Knight, 2007, p.165) could have a different meaning for part-time students from full-time students. The suitability of these questionnaires for part-time students is unclear due to the lack of empirical evidence. This relates to motivations to study which the USEM model (Knight and Yorke, 2003) and the EEQ and SEQ (Yorke and Knight, 2007) do not appear to fully explore.

Dacre Pool and Sewell (2007) are critical of the USEM model in terms of accessibility for non-experts such as parents and students. Whilst they acknowledge the strengths and relevance of the USEM model within their work, they offer the CareerEDGE model of Graduate Employability as an alternative framework, which should appeal to non-experts.

A further criticism of the USEM model could be the relevance for part-time students if the model is largely determined and designed based on what employers are “*seeking when hiring new graduates*” (Yorke and Knight, 2007, p. 158). How do part-time students therefore position themselves in terms of being described as a “*new graduate*” particularly if already working within an organisation and engaging in HE to enhance their learning and knowledge to support their existing position and organisational changes.

It is debatable whether the USEM model can be utilised to inform curriculum development for all students regardless of mode of study, potentially it is primarily

focussed on traditional full-time undergraduate students. This links to the overarching aim of this study to determine the relevance of models and how they relate to part-time students and their career development. If USEM and the EEQ are utilised to inform pedagogy and curriculum development within HE, the relevance and suitability of the model requires further clarification. A key determinant within the evaluation of this model and its relevance for part-time students is the further investigation of their motivations for study and the contextual elements as defined by Williams *et al.* (2016).

2.5.2 Dacre Pool and Sewell (2007) CareerEDGE Model

The CareerEDGE model (Dacre Pool and Sewell, 2007) identified in Cole and Tibby’s (2013) Framework for Employability is designed on the basis that “*each component is essential to the development of graduate employability*” (Dacre Pool, 2017, p. 318). The model (Figure 2.6 below) works on the principle that through providing access and development opportunities to students in HE as detailed in the bottom tier of the model, students will be able to develop to the next tier of self-development through individual reflection and evaluation. Dacre Pool and Sewell (2007) argue that this is the critical link to employability.

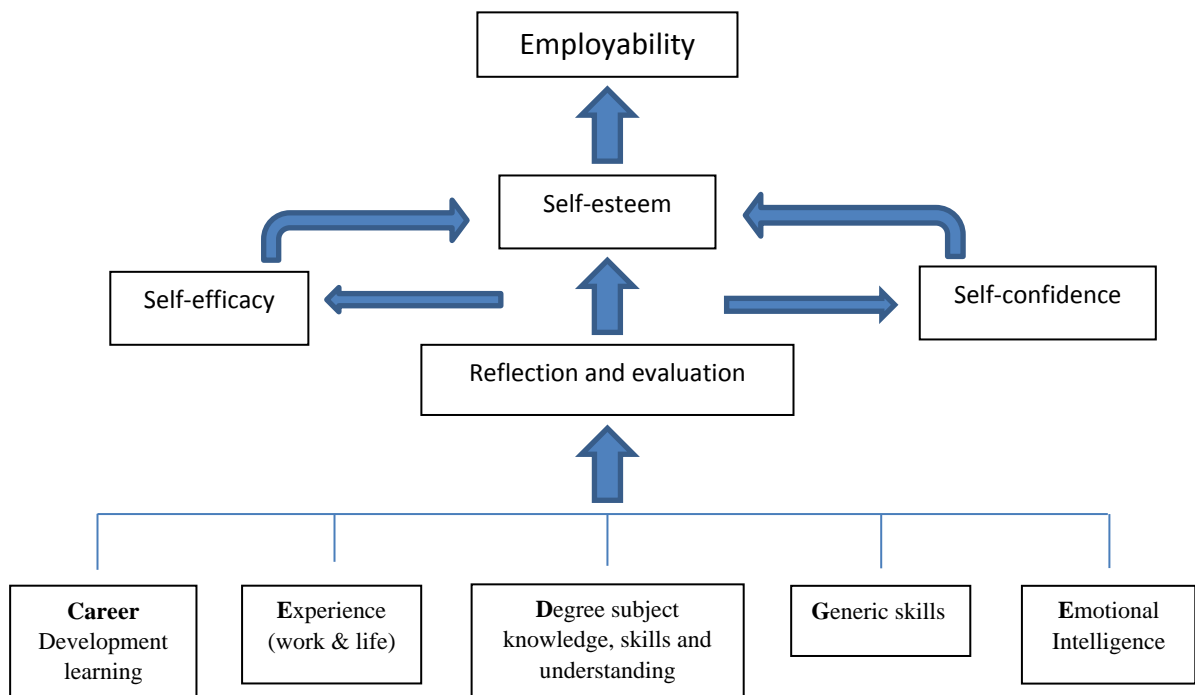


Figure 2.6 The CareerEDGE Model of Graduate Employability (Dacre Pool and Sewell 2007).

Dacre Pool (2017, p. 318) explains that the model was “*developed in order to provide a clear, practical model that would allow this multifaceted concept to be explained easily and could be used as a framework for working with students to develop their employability. It is an attempt to bring together the earlier work of researchers in this field into one comprehensive, coherent model that could be used to explain the concept to academics, careers guidance professionals, students, their parents and employers*”. Based on the limited measurement tools available for students to consider the development of their employability, Dacre Pool, Qualter and Sewell (2014) developed the Employability Development Profile (EDP). Based largely on the CareerEDGE model developed by Dacre Pool and Sewell in 2007, the EDP is a self-completing diagnostic tool for students to complete in order to rate themselves, Dacre Pool *et al.* (2014, p. 305) suggest: “*reflection and evaluation is essential as it enables the student to integrate this new information which should lead to enhanced self-efficacy, self-confidence and self-esteem. The CareerEDGE model is an attempt to bring together and extend earlier work of researchers in this field (eg. Hillage and Pollard, 1998, Harvey et al. 2002; Knight and Yorke, 2004) into one comprehensive and coherent model*”. This model links to the recent review by Williams *et al.* (2016) in respect of the career development dimension, who also emphasise the importance of self-awareness and reflection, claiming that if there is a lack of self-awareness, individuals cannot display the right signals.

Whilst the CareerEDGE model provides a framework for students to complete and facilitates the individual learner to evaluate their own employability through identifying areas for development and areas of strength, it is very much student led. Whilst the model and EDP is beneficial for the personal development of an individual learner, it does not help inform curriculum design and development of employability strategies. Further to this, the questionnaire is geared towards the bottom level of the CareerEDGE model and does not encompass the middle tier in terms of self-esteem, self-confidence and self-efficacy. The dimensions on the bottom tier of the model provide an opportunity for a learner to evaluate and reflect on their emotional intelligence, general skills, degree subject knowledge, experience / work life and career development learning. It is therefore argued that the EDP stops short at determining the bottom tier only and other constructs associated with graduate

employability such as graduate identity could have been considered in greater context within this model and measurement tool.

The EDP does, however provide a valuable measurement scale, elements of which can be utilised within this study and the development of a model of employability for part-time students.

2.5.3 CBI and Universities UK (2009) Future Fit: Preparing Graduates for the World of Work

A report in 2009 by the CBI linked employability to the economy and a need for the workforce to “*possess skills, knowledge and attitudes that they can take to any work situation and have the ability and willingness to continually adapt and prosper in a changing world*”. This links to the later work of Okay-Somerville and Scholarios (2017) in terms of a human capital perspective and the possession of skills, knowledge and attributes whilst also relating to both a positional and process approach in terms of transition from university to work. Arguably though, part-time students who are engaging in HE but also working will not be transitioning from university to work in the same sense. They might be upskilling or changing career but how they relate to this perspective is likely to differ from full-time students who may be seeking a graduate position.

Evidently, a part-time student who is unemployed will relate more to this conceptualisation and may therefore be looking to develop their employability skills as suggested in the CBI report. Again, this reinforces the diversity which may exist within the demographics of part-time students and why it is therefore difficult to ascertain a model which suits their needs. Some part-time students will have a greater need to develop their knowledge and skills than some of their peers and this therefore adds a complexity to designing a framework which captures the diverse nature of such students.

2.5.4 Career Management (Bridgstock 2009)

Bridgstock (2009, p. 31) acknowledges the debate between what employability is and what attributes a graduate should possess to enhance their employability but suggests that in a “*knowledge-intensive economy, employability involves far more than*

possession of the generic skills listed by graduate employers as attractive". Bridgstock (2009, p. 31) therefore implies that to achieve the best social and economic outcomes, graduates need to ensure that they can "*navigate the world of work and self-manage the career building process*". Based on this belief, Bridgstock developed a conceptual model (Figure 2.7) which considers both career management skills and graduate attributes for employability. The model could potentially facilitate HE providers to develop programmes which encourage career management in order to enhance the employability of graduates.

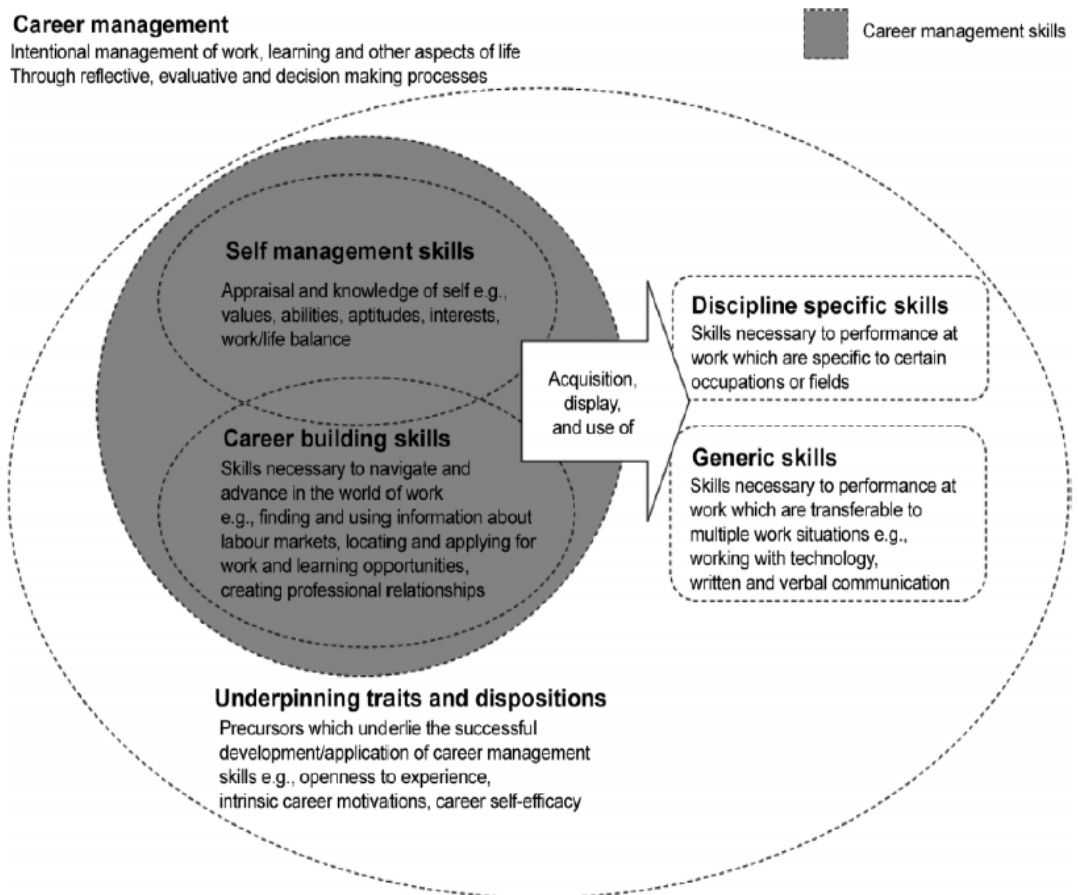


Figure 2.7 Bridgstock's (2009) Career Management model

The study by Bridgstock (2009, p. 32) examined the current interpretations of graduate attributes and determined that "*generic skill development is an inadequate answer to the question of graduate employability and that for enhanced graduate outcomes in the immediate term and on a sustained basis, universities should promote broader career management competence in students*". It is interesting to assess the

extent to which this concept relates to part-time students and their career management. Perhaps for those engaging with HE because they are seeking a career change, this could be particularly relevant but for those students on degree apprenticeships, they might be seeking a more skills-based approach as opposed to career management. Based on this, HEIs arguably need to design programmes to support the career management for those sponsored by their employers, which might align HE to training as opposed to education. The chosen programme of study and expectations of both the employer and students is potentially an influencing factor. The motivation and drivers for engaging in HE in terms of part-time study could therefore largely influence the perceptions of career management as a conceptualisation.

Bridgstock (2009) suggests therefore, that when relating employability to a skills and dispositions approach and their associated appeal to potential employers, the definitions of employability can be quite narrow in outlook and focussed on short term outcomes to obtain a job. Therefore, the criticism of this approach also aligns to Holmes (2013), who claims that employability is not just the gaining of skills either both in terms of generic skills and soft skills, but HE also needs to consider other aspects relating to processual perspective which relates to graduate identity. The conceptual model posited by Bridgstock (2009, p. 36) therefore relates career management to an ongoing process whereby an individual engages in “*reflective, evaluative and decision-making process*” making use of both “*self-management skills*” and “*career building skills*”. Self-management skills relate to the appraisal and knowledge of the individual particularly in terms of “*values, abilities, interests and goals*” (Bridgstock, 2009, p. 36) and again closely aligns to career identity.

Bridgstock (2009, p. 36) relates career building skills to the ability to “*navigate and advance in the world of work*” and refers to an example of being able to find and utilise information based on the labour market, creation of professional relationships and the ability to find and apply for learning and work opportunities. Many of the features within this model therefore relate to the dimensions of employability as determined in the work of Williams *et al.* (2016). Therefore the model encompasses human capital theory particularly in terms of the acquisition of skills both generic and discipline special and social capital in terms of building relationships. The

development and display of such skills is linked to signalling theory in terms of the individual being able to display such skills. The contextual element as identified in the review by Williams *et al.* (2016) as also being relevant within this model due to its association with career building skills and ability to navigate the world of work through utilising information about the labour market.

Bridgstock’s (2009) model therefore focuses on the need for graduates to be able to self-manage and self-build their careers. Bridgstock (2009) does however recognise that a “*one-size-fits-all*” approach to career management is not sufficient due to the variables within disciplines. In order to develop programmes of study which are effective and current, “*academic staff, industry partners, careers service staff and students*” should be involved in “*both curriculum design and implementation*” (Bridgstock, 2009). It is therefore valid to take on board the perceptions of both full and part-time students at both an under-graduate and post-graduate level.

2.5.5 Graduate Identity Approach (Holmes, 2013)

A further dimension within the conceptualisations of employability is that offered by Holmes (2013) and the claim-affirmation model. The model illustrated in Figure 2.8 attempts to demonstrate the trajectories of individuals as they progress from education and / or training and enter employment.

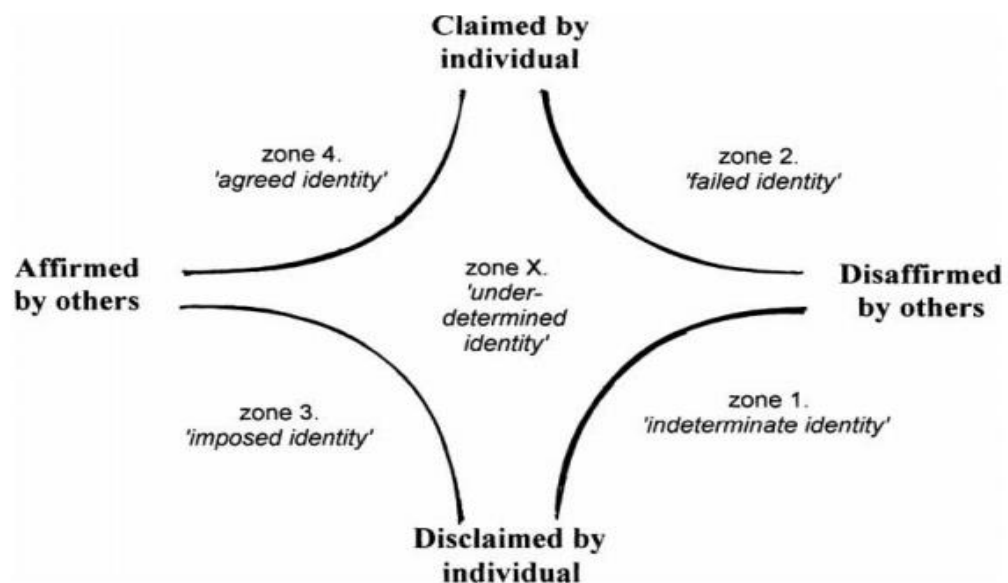


Figure 2.8 Claim-affirmation model of modalities of emergent identity (Holmes, 2013, p. 550)

The model is designed on the term “*emergent identity*” which as Holmes (2013, p. 549) explains might “*be used to distinguish the concern here from notions either of identity as social ascription or of identity as self-concept. It is not either-or but both-and*”. Based on this, Holmes (2013, p. 549) posits that emergent identity therefore relates to the “*interaction between the individual and significant others in respect of the kind of person the individual is to be taken to be in, and in relation to, the particular situation*”. Therefore an individual could claim a particular identity but this claim may or may not be confirmed by others. Based on the model above, if the claims of an individual can be affirmed by another, the identity claimed is agreed whereas if others disaffirm the notion, the identity claimed by the individual has essentially failed. Hence, a graduate could apply for a graduate position but fails to be appointed within this role and takes a non-graduate position instead, hence moving in zone 2. In zone 3 of the model, an identity may be presumed by others but disclaimed by the individual. This could be particularly relevant for a part-time student employed within a role whereby they require further training and development in order to develop their employability within the workplace. Therefore, the model allows for movement across the modalities as they develop within the working world.

It is therefore worth investigating how part-time students, particularly those already employed, relate to this model. Perhaps if looking to change employment, an individual would find this model more relevant than those, say, already employed but looking to enhance potential opportunities within their current workplace. The model is however, conceptual and does not offer any measurement scales to test the suitability of this conceptualisation further.

The graduate identity approach relates to the more recent work of Tomlinson (2017) who also considers identity within the dimension of graduate capital. Identity is however a broad subject area and whilst it has been acknowledged within this literature review as being linked to self-management and development of graduate capital, identity work and personal identity factors are outside the scope of this study. The dimension of graduate capital and the relevance of identity as a concept within the broader context is however incorporated within this study.

2.5.6 Summary of Models of Employability

As demonstrated above a number of models of employability exist. When reflecting and evaluating these further it is evident that the USEM model (Knight and Yorke, 2003) appears to have more relevance for full-time students looking to enter the labour market. It is argued that this model is predominantly skills based and largely relates to a mainstream approach to employability as defined by Delaney and Farren (2016). There is therefore a gap within this model and the subsequent SEQ and EEQ questionnaires in terms of their suitability for part-time students. The CareerEDGE model posited by Dacre Pool and Sewell (2007) whilst developed from empirical research again focuses predominantly on a mainstream approach to employability and the development of skills both generic and subject specific. The two models which are frequently referred to in extant literature therefore provide opportunities for students to evaluate their employability but largely from a skills-based approach.

The model put forward by Bridgstock (2009) is conceptual but demonstrates the significance of career building. This model therefore aligns with the processual and positional theoretical perspectives of employability emphasised by Delaney and Farren (2016). Whilst this model captures the importance of career development which part-time students could relate to, the model is conceptual and there is a gap in terms of providing a measurement tool to test the validity for part-time students.

The CBI (2009) offer a descriptive conceptualisation of employability as opposed to a model and again is predominantly focussed on a mainstream approach and the acquisition of skills. A gap exists in this perspective in terms of failing to fully consider the diverse demographics of part-time students and provides further justification for a more inclusive model to be developed.

Holmes (2013) model offers an alternative to the mainstream approach associated with skills, knowledge and attributes and adopts a graduate identity approach to employability. This links to the career building and self-management approach suggested by Bridgstock (2009) but again, the model is conceptual and its validity in terms of relevance for part-time students cannot be fully understood. Table 2.3 summarises the key features and gaps associated with the models discussed above.

Model / Conceptualisation	Key Dimensions - Approach	Gaps	Relevance for part-time students
USEM (Knight and Yorke, 2003)	Focus on skills approach and embedding employability within the curriculum – relates predominantly to the mainstream approach (Delaney and Farren, 2016)	Conceptual model but SEQ and EEQ later developed Limited consideration of process and positional theoretical perspectives	Suitability and relevance of the SEQ and EEQ for part-time students is not considered within the work of Knight and Yorke
Career EDGE (Dacre Pool and Sewell, 2007)	Focus on skills – extension of USEM. Model developed from empirical research. Adopts a predominantly mainstream approach (Delaney and Farren, 2016)	Limited consideration of process and positional theoretical perspectives	Number of questions presented on the EDP would not be relevant for part-time students
Future Fit: Preparing Graduates for the world of work (CBI and Universities UK 2009)	Focus is on the possession of skills and predominantly adopts a mainstream approach (Delaney and Farren, 2016)	A descriptive conceptualisation as opposed to a model of employability	Conceptualisation does not take into account the diverse nature of part-time students some of which will already be working
Career Management (Bridgstock's, 2009)	Focus on career building through self-management and incorporates possession of skills and attributes alongside consideration of positional and processual perspectives	Conceptual model	Relevant for part-time students in terms of considering the dimensions of both Capital and Career Management but the model is conceptual and does not offer a measurement tool to determine the reliability and validity for part-time students
Graduate Identity Approach (Holmes, 2013)	Focus is largely on the positional and processual	Conceptual model	Relevant for part-time students but has not been empirically tested to determine how part-time students relate to an alternative positional or processual approach

Table 2.3 Summary of models and conceptualisations

2.6 Chapter Summary

The aim of this chapter has been to review the dimensions of employability. This has comprised exploring extant literature on the concepts of graduate employability, capital, career management, motivations to study and stakeholder's perspectives on employability.

It is evident from the review of the literature that employability is a complex area and has a number of interpretations which are largely influenced by the individual stakeholders' perspective. This is supported by Tymon (2013, p. 842) who claims "*employability is complex and multidimensional*" and warns against being simplistic when trying to define it. Tymon (2013) continues to explain the complexity based on the work of Hugh-Jones, Sutherland and Cross (2006) in that employability should be viewed from the different perspectives of employer, HEI and the student. Tymon (2013, p. 842) makes reference to the work of Andrews and Higson (2008); Feldman (2009); Rae (2007) and Yorke (2004) and suggests it is easier and better to develop employability with "*employment-based training and experience, there is little doubt that employers and employers' organisations are probably best placed to provide this work based training and experience, which in the past they did*". However, organisations are becoming increasingly reluctant to invest in developing the transferrable skills of graduates due to economic pressures and beliefs about the lack of commitment from Generation Y employees (Jackson, 2010).

For part-time students, graduate employability could relate to more than just the initial acquisition of a graduate role. Neugebauer and Evans-Brain (2016, p. 18) suggest six elements of employability which are relevant for both graduation and beyond and considered essential for sustained employability:

- Managed Applications
- Qualifications
- Continued Learning
- Experience
- Self-Belief
- Interpersonal skills

Neugebauer and Evans-Brain (2016, p. 11) therefore suggest employability is not just about people entering the workforce now but is about *“developing the skills to find work that is engaging and rewarding for the whole of our working lives. Employability is dynamic and vibrant, and in line with our personal values”*. This dimension of employability could therefore be particularly relevant for a part-time student who is considering a change of career but requires a formal qualification in order to pursue this further.

2.6.1 Part-time Students and Employability – Gap in Theory

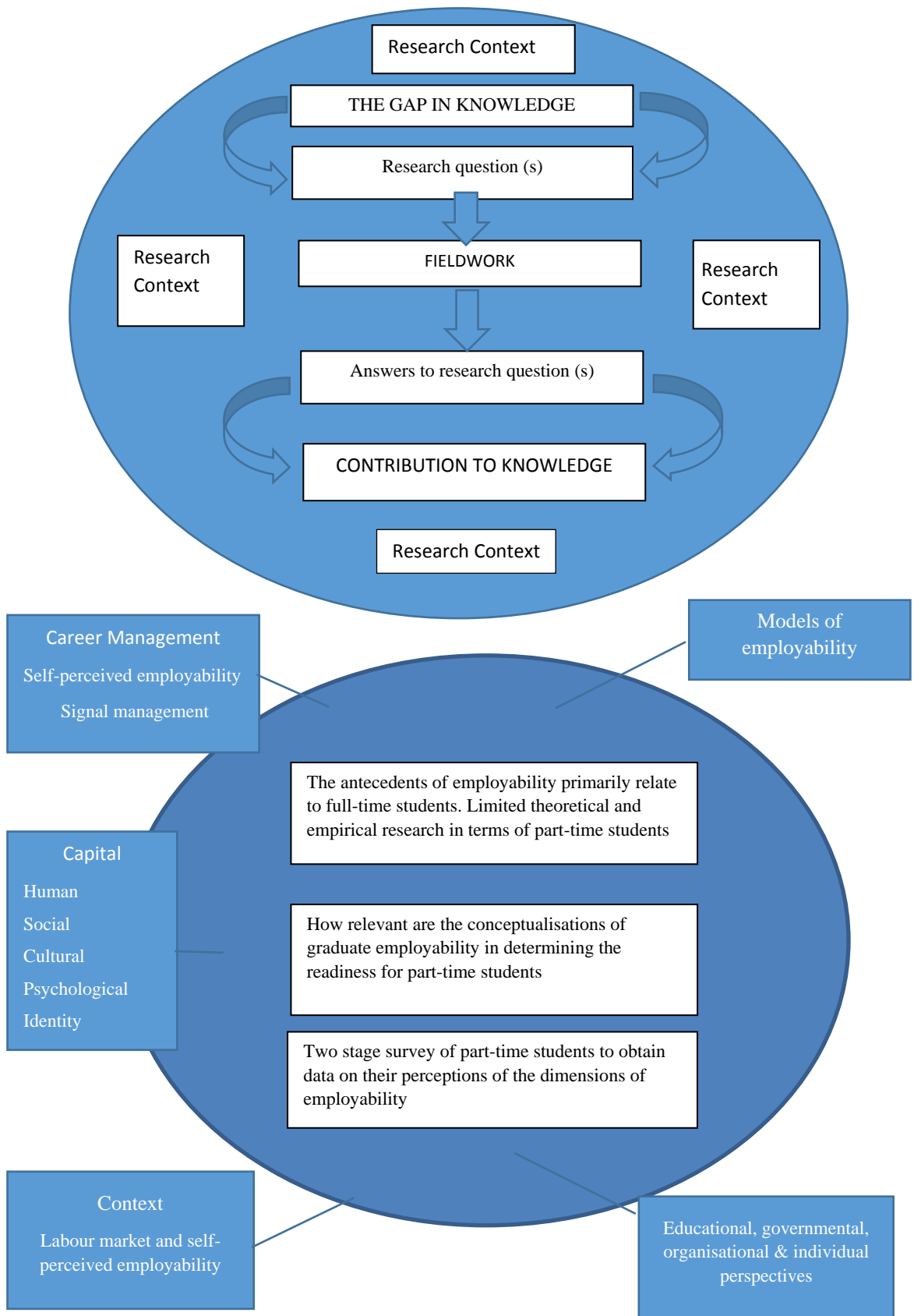
When evaluating employability literature, the main focus is generally on full-time students as they make the transition from HE to work (Delaney and Farren, 2016). Studies undertaken by Callender, Wilkinson Gibson and Perkins (2011) and Jackson (2016) bridge some of the gaps in the literature, particularly in terms of the impact of part-time distance learning programmes and development of graduate identity amongst such learners. It is however evident that overall there is little research into the perspectives of part-time students on taught programmes and how they relate and view employability strategies. As suggested by Delaney and Farren, (2016, p. 195) employability *“relates to one’s ability to get a job or get promoted in one’s existing job. For those who are self-employed, employability relates to getting work”*. This statement demonstrates the diverse nature of employability, it effectively means different things to each individual and is therefore subjective depending on what context it is being viewed from. Perhaps this is why employability is difficult to define. Certainly, within the context of this study, the aim is to consider the differing perspectives to gain a better understanding of how relevant part-time students find such strategies. On the basis of employability being viewed not just about the initial acquisition of a suitable position, evaluating motivations for study amongst part-time students could be significant factor in terms of how such learners view and relate to the conceptualisations of employability.

Based on the review of extant literature and the identification of a general gap in empirical research surrounding the conceptualisations of employability and part-time students, the aim of this thesis is to further explore the significance of existing

conceptualisations to design and test a model of employability for such learners. Whilst a number of models such as USEM (Knight and Yorke, 2003); CareerEDGE (Dacre Pool and Sewell, 2007) and Career Management (Bridgstock, 2009) exist, they are predominantly focussed on full-time students and their graduate employability. The models include the numerous conceptualisations of employability but what aspects of these dimensions can be utilised for the career enhancement of part-time learners? The CareerEDGE model presented by Dacre Pool and Sewell (2007) also comprises a measurement tool and has been empirically tested. A number of the questions do however appear more relevant for the traditional full-time student. There is a tendency therefore to absorb part-time students within the same structures and frameworks within HE which have been developed for full-time students. Whilst existing models and conceptualisations will have some relevance for part-time students, there is a lack of research into how these could be best utilised for such learners. This study therefore considers the antecedents of employability to determine how these could enhance the careers of part-time students.

Figure 2.9 below builds on the research map presented by Leshem and Trafford (2007) and demonstrates the research context determined from the literature review presented within this chapter. The inner section of the circle captures the main points to be explored further and which form the basis of next stage of the study. Primary data collection and analysis will be undertaken in two parts, the first being the design of a research instrument to empirically test the perceptions of part-time students. The second part of this study will further evaluate the proposed research instrument and the positing of a model of employability for part-time students. The justification for the research methodology adopted and research design and methods to carry out the primary research data are explained in Chapter 3.

Figure 2.9 Essential components of the research based on Leshem and Trafford (2007)



CHAPTER THREE

Research Methodology, Design and Methods

3.0 Chapter Overview

Following on from the literature review, this chapter explains the philosophical underpinnings supporting the research. This includes the justification for the methodological selection of a quantitative based study and the rationale for the development of a questionnaire as a research instrument and the associated constructs and scales as a measurement tool. The research methodology and methods adopted and justification for the approach to the interpretation of the data findings and analysis are explained. An explanation of ethical considerations concludes this chapter alongside potential strengths and limitations of the research.

3.1 Introduction

Both Crotty (2009) and Easterby-Smith *et al.* (2012) emphasise the importance of defining and understanding the research philosophy as this informs the overall research design and investigation of the study. The identification of the researcher's philosophical underpinnings and metatheoretical assumptions are a key part in determining how data is collected, analysed, theorized and written up (Symon & Cassell, 2012). It is these assumptions, which will form the methodology of the research. O'Reilly and Kiyimba (2015) support this further and suggest the ontological, epistemological and methodological position of the researcher inform the "*choice of methods for data collection and analysis*" (O'Reilly and Kiyimba, 2015, p. 2). The research philosophy is therefore the approach taken to make sense of and examine the knowledge, which has been gained through undertaking the research.

This chapter therefore explains the approach taken to undertake this study along with a rationale and justification for the adopted approach and examination of the knowledge gained. This includes clarification of the adopted research philosophy and assumptions along with the justification for the research design, survey design and method of data collection and analysis.

The structure of this chapter is as follows:

- Philosophical Assumptions and Research Paradigm
- Ontological and Epistemological Assumptions
- Research Design – Instrument Development, Participant Selection and Analysis
 - Stage 1 – EFA and development of a conceptual model
 - Stage 2 – CFA and SEM
- Ethical Considerations
- Strengths and Limitations

3.2 Philosophical Assumptions and Research Paradigm

The philosophical underpinnings and the impact on the research methodology were emphasised in earlier research by Burrell and Morgan (1979, p. i), who identified that social theory is based on different metatheoretical assumptions “*about the nature of social science and the nature of society*”. A paradigm is described by O’Reilly and Kiyimba (2015, p. 3) as a “*contextual framework which provides the overarching theoretical basis for undertaking research*”. Acknowledging the work of Kuhn in 1962, a paradigm is essentially an individual’s “*set of beliefs or assumptions*” and it is within the context of these which we “*define the nature of the world and the place of individuals within it*” (O’Reilly and Kiyimba, 2015, p. 3).

Symon & Cassell (2012), suggest that the identification of the researcher’s own philosophical underpinnings and assumptions form a key part in determining how data is therefore collected; analysed; theorized and written up. The researcher’s philosophical approach is therefore based on his or her own explicit or implicit assumptions about the social world and the way in which it can be investigated (Burrell and Morgan, 1979). Such assumptions are conceptualised by Burrell and Morgan (1979 p. 1) who identify these as being related to “*ontology, epistemology, human nature and methodology*”.

The philosophical approach to this study is therefore based on my own explicit or implicit assumptions about the social world in terms of what do I know and how do I know it and is informed by my ontological and epistemological assumptions.

3.3 Ontological and Epistemological Assumptions

My ontological considerations have influenced my epistemological and methodological framework in terms of how I view reality. Ontology being a “*study of being, that is, the nature of existence and what constitutes reality*” (Gray, 2014, p. 19) and embodies an understanding of “*what is*”. From a relativist’s ontological perspective, multiple realities can exist and there are numerous ways of accessing them (Gray, 2014) and such realities will be shaped by the context, and evolves and changes. Burrell and Morgan (1979, p. 4) refer to this ontological perspective as nominalism and supports the theory that the “*assumption that the social world is external to individual cognitions is made up of nothing more than names, concepts and labels which are used to structure reality*”. Whereas a relativist attempts to make sense of the world, a realist perceives one truth exists and the social world is “*external to individual cognition*” and within the real world it is made up of “*hard, tangible and relatively immutable structures*” (Burrell and Morgan, 1979, p. 4). A realist assumes that an individual does not create a social world but exists within it and that the social world “*is as hard and concrete as the natural world*” (Burrell and Morgan, 1979, p. 4).

It is within the realist perspective that I relate to the most, particularly in terms of what I am aiming to accomplish from this study which is to determine how part-time students exist within their social world as opposed to how they make sense of their world. Part-time students are engaging with HE but how do they fit within the current conceptualisations of graduate employability? A range of qualitative, quantitative and mixed methods studies were evaluated within the literature review, the findings of which contribute to the existing antecedents of employability. It is further acknowledged that depending on an individual’s philosophical underpinnings and nature of study, the concept of employability could have very different meanings. The purpose of this study is not, however, to determine the meaning of employability but to instead consider the existing conceptualisations and posit a model of employability for part-time students. Generalisations are therefore sought from this study from an objective positioning.

Epistemology signifies the theories of and production of knowledge and within the context of research, “*interaction with the participant is the primary vehicle of*

knowledge production” (O’Reilly and Kiyimba, 2015, p. 7). The epistemological position of the researcher therefore shapes both the conceptualisation and communication with the participants of the research process (O’Reilly and Kiyimba, 2015). Through adopting a positivist perspective, Hallebone and Priest (2009, p. 27) suggest that a positivist epistemology seeks “*to establish descriptive and predictive principles and rules for a reality that exists independently of an observer or participant*”. A contrasting perspective to this is interpretivism which is the “*subjective meaning of social action*” (Bryman, 2008, p. 694).

Influenced by positivism and objectivism orientations, a quantitative research strategy forms the basis for this study. Through adopting a deductive approach, it is possible to test “*the relationship between theory and research, in which the accent is placed on the testing of theories*” (Bryman, 2008, p. 22). Based on the rationale that a number of theories surrounding graduate employability already exist as detailed in Chapter 2, the research strategy for the next stage is to determine how part-time students exist within current conceptualisations and utilise the information to develop a proposed model and framework.

The research design therefore comprises of survey research which as explained by Bryman (2008) is a quantitative approach which fits with a positivist perspective. The adoption of this approach enables the distribution of a survey questionnaire to a large sample in order to obtain objective and credible data. An alternative to this approach would be the adoption of a qualitative strategy which is inductive in terms of generating theory and tends to adopt an interpretivism and constructionism philosophy (Bryman, 2008). The aim of this approach attempts to “*understand the ways in which people act and account for their actions*” (Gray, 2017, p. 172). As the aim of this study is to capture responses from part-time students and their views on the antecedents of employability through the use of a survey to obtain hard data and undertake statistical analysis, a quantitative research strategy is justified. As explained by Trafford and Leshem (2008, p. 97) if the intended research is to test theory, “*choose a deductive approach*”.

Within social research, the relationship between actual theory and research influences whether a deductive or inductive approach is taken to the research (Dewey, 1933). If the research is guided by the theory, this is considered a deductive approach whereas an inductive approach is when a theory is the outcome of the research (Bryman, 2008). Hypothesis testing therefore forms the basis of a deductive approach where the theory is generally refuted, confirmed or even modified (Gray, 2014). Within an inductive process, Gray (2014, p. 17) argues that data is collected and analysed to identify if “*patterns emerge that suggest relationships between variables*” and it is from the observations of the data, generalizations, relationships that theories can be constructed.

My ontological and epistemological assumptions have therefore supported the design and analysis of primary data collection. The outcome being a quantitative explanatory methodology aligned with a realist ontology and positivist epistemology. Data collection comprised of two stages, the first being a survey to investigate the relationship between the conceptualisations of employability and how part-time students related to such concepts. Through exploring this relationship, it was possible to determine the key constructs which relate to part-time students the most and posit a conceptual model of employability for part-time students. The proposition of a number of hypotheses for further testing at Stage 2 of the study was the outcome of Stage 1.

The research philosophy is summarised in Figure 3.1. The research approach is also represented diagrammatically and will be expanded on further in this chapter.

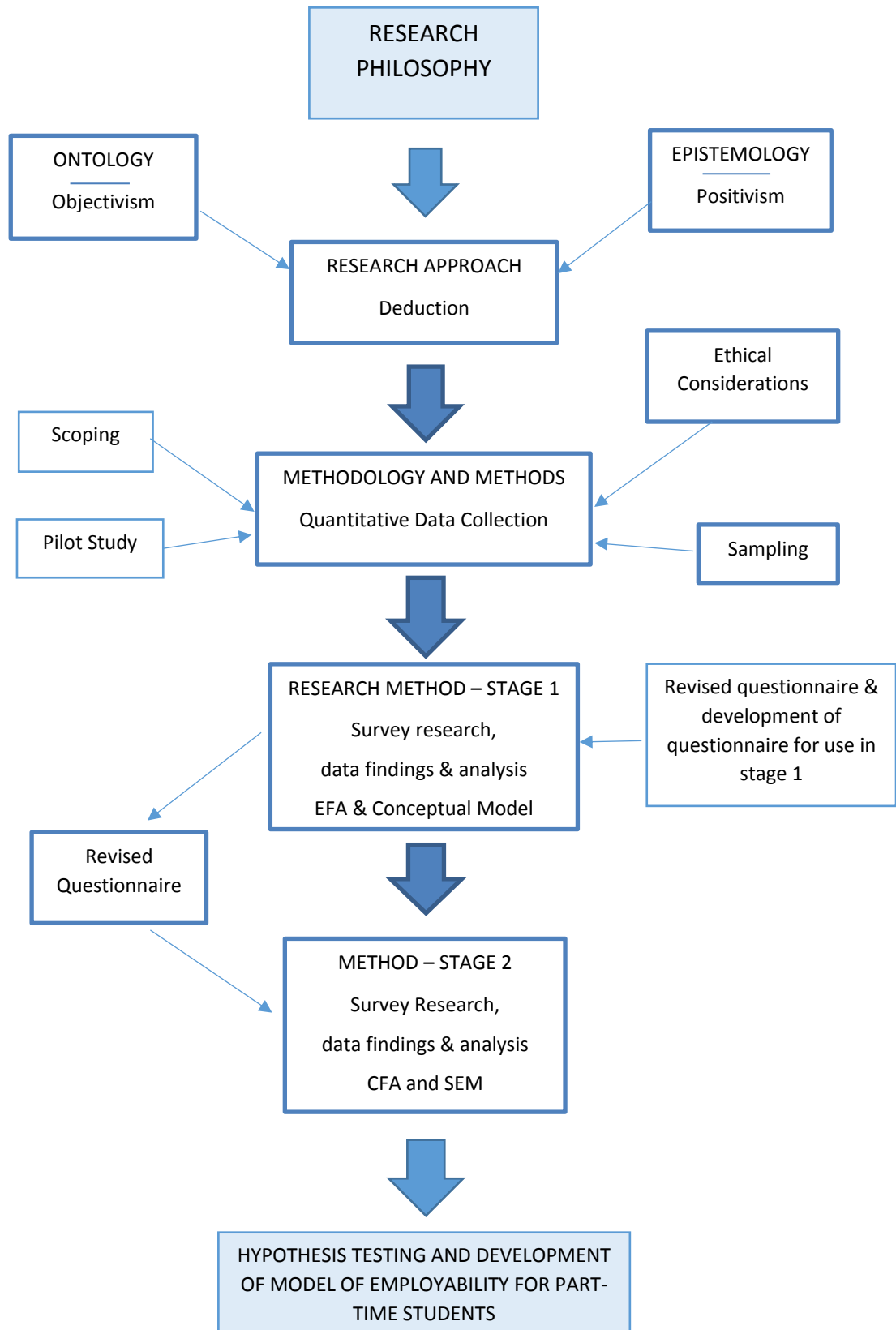


Figure 3.1 Research Philosophy, Approach and Design

3.4 Research Design

In order to address the research question and provide a framework for the study, the research design identifies a strategy for the collection and analysis of data. Hair, Wolfinbarger Celsi, Money, Samouel and Page (2011, p. 456) state the “*research design provides the basic directions or “recipe” for carrying out the project*”. Babbie (2010) also acknowledges that the design of the research should link to the defined research question and support the data collection. As a result of selecting a deductive approach, this thesis will test theory as opposed to developing and constructing theory (Trafford and Leshem, 2008). Data therefore needs to be collected which reflects the research philosophy and adopted approach.

The recipe for this study is therefore based on examining existing theories within the literature review and establishing concepts, which relate to employability. Hair *et al.* (2011, p. 209) define a concept as, “*an abstraction or idea formed by the perception of phenomena. The idea is a combination of a number of similar characteristics of the concept. The characteristics are the variables that, collectively, define the concept and make its measurement possible. Indeed, together they indirectly measure the concept, which is also referred to as a construct*”. The first stage of the primary data collection for this study therefore relates to the determination of constructs to posit a conceptual framework of employability for part-time learners. The second stage of the primary data collection and analysis further examines the validity and reliability of the conceptual model and tests the theory and hypotheses determined from Stage 1.

The research design for this study therefore comprises a two-staged approach. An exploratory position to reduce the number of variables from extant studies on employability and development of a conceptual model of employability for part-time students form the first stage. The second stage comprises a confirmatory measurement position, which empirically tests the conceptual model through the application of structural equation modelling (SEM) and testing of hypotheses determined from Stage 1.

3.4.1 Research Design Stage 1

The overarching aim of this study is to evaluate the antecedents of employability and develop a model of employability for part-time students. Informed by the literature review, the first stage explores how part-time students respond to the conceptualisations of human, social, psychological, cultural and graduate capital, self-management and signal management. Contextual issues relating to demand and self-perceived employability are also considered. A survey to investigate the perceptions of these concepts therefore forms the first stage of the data collection, the aim being to determine which antecedents of employability have a positive and significant relationship for part-time students. To determine this relationship and test theory, a quantitative research methodology facilitates exploratory and confirmatory research to be undertaken. The first stage in the process therefore comprises the design and development of a questionnaire as the method of data collection.

3.4.1.1 Choice of Approach

To identify patterns and relationships in the data collected during Stage 1 of the study and through the distribution of a survey questionnaire, exploratory factor analysis (EFA) was selected. EFA is a form of multivariate analysis and a technique which determines how various items relate and form factors, each factor thereby representing several variables. Salkind (2017) suggests this can be a more efficient method to present outcomes as opposed to individual variables. The aim of this technique being to assign a name to a factor which will “*reflect the content and ideas underlying how the variables might be related*” (Salkind, 2017, p. 337). It is therefore a data reduction method to simplify the dimensions of a large data set into a smaller component set. As further explained by Hair *et al.* (2011, p. 386) “*Factor analysis is a multivariate statistical technique that can summarize the information from a large number of variables into a much smaller number of variables or factors*”. Tabachnick and Fidell (2013) further support this and recognise that variables which are, “*correlated with one another but largely independent of other subsets of variables are combined into factors. Factors are thought to reflect underlying processes that have created the correlations among variables*”. Based on the number of conceptualisations, which relate to employability and the number of closely related terms, the use of EFA facilitates the exploration of existing dimensions through obtaining responses from part-time students. The findings of

which enables the large number of variables within the conceptualisations of capital and career management to be narrowed down into a smaller set of factors. The aim here is to define the factors, which represent the perspectives of part-time students. The exploratory research undertaken during Stage 1 therefore determines the relationships and key themes within the current conceptualisations of employability, which can then be further tested through CFA and SEM forming the second stage of the research design.

3.4.1.2 Questionnaire Design

In accordance with a deductive research methodology to test theory, the distribution of a questionnaire to a representative sample of part-time students forms the method of data collection. The use of a questionnaire has both advantages and disadvantages. Gray (2017) acknowledges the use of a questionnaire as being popular due to the relative low cost in terms of both money and time compared to other methods of data collection. Of more relevance for this study however, is the adoption of a deductive approach to test theory and the requirement therefore to have a large sample. A questionnaire enables the targeting of a larger sample compared with other methods of data collection such as interviews or focus groups. The use of a questionnaire also assures anonymity and reduces potential bias compared to interviews for example where the interviewer could unknowingly impose their own views. However, the potential disadvantage of utilising a questionnaire as a method of data collection is a poor response rate, particularly if the questions are ambiguous or the questionnaire too long (Gray, 2017). The design of the questionnaire therefore requires careful consideration in order to encourage respondents to complete the questionnaire whilst also avoiding ambiguous and / or bias questions.

The use of validated scale sets from previous studies is one approach worthy of consideration when designing a questionnaire, which will increase both the reliability and validity of the questionnaire (Gray, 2017). As further explained by Gray (2017, p. 379) a scale comprises a number of items which make up the questionnaire and it is the scale which seeks “*to measure a phenomenon that we believe to exist, but which we cannot assess directly*”. A wide plethora of literature considers employability and a number of measurement scales from earlier quantitative studies exist affording an opportunity to utilise validated measurement tools. Whilst the aim of this study is to

develop a model of employability for part-time students and current research tends to focus on both organisational and full-time student perspectives, there is still scope to utilise validated items from various studies and the suitability of such items being explored through the application of EFA. The benefit of developing a questionnaire from existing validated scales and use of EFA provides an opportunity to reduce the number of variables and omit those factors which are not significant. The outcome being the design of a conceptual model which can be empirically tested at Stage 2 of the study on the basis of a refined and validated questionnaire.

A review of the literature and in particular the work of Williams *et al.* (2016) and Tomlinson (2017) identified a number of conceptualisations. Such conceptualisations contributed to the development of the titles for the scales detailed in the conceptual model. Within each scale, a number of items were identified and the design of the questionnaire subsequently based on earlier studies including the work of Bernston and Marklund (2007); Rothwell and Arnold (2007); Rothwell, Herbert and Rothwell (2008); York and Knight (2007) and Dacre Pool *et al.* (2014) as seen in Appendix 2. The rationale for utilising questions from these studies is based on the premise that the questions had previously been utilised within former studies and as such formed a validated and reliable data set. Section 3.4.1.3 details the nature and scope of the questions further.

To further support and determine relevant and suitable questions from the existing measurement tools, an initial scoping exercise was undertaken with four part-time students at Birkbeck University. The students were provided with a copy of the questionnaires as attached in Appendix 2 and asked to rate the relevance and suitability of each question. A discussion about the questionnaires provided further qualitative comments and feedback. The informal discussions with the participants and analysis of their responses subsequently informed the development of the questionnaire used in the exploratory first stage of the study. Questions from other studies were also utilised in the development of the questionnaire and included scales from the work of Coetzee (2014); Lee and Pang (2014); Kossek *et al.* (1998); Praskova, Creed and Hood (2014); van Dam (2004) and Wittekind *et al.* (2010). However, prior to the distribution of a questionnaire, a pilot study should be first undertaken to identify any ambiguous questions and to enable an initial analysis and

refinement. A pilot also provides an opportunity for feedback from the respondents, which will help inform any amendments and modifications to be made (Cohen, Manion and Morrison, 2005).

Responses to the questions posed in the questionnaire therefore enables the investigation of the respondent's attitudes towards the conceptualisations of graduate employability. The technique adopted to conduct this research was the use of the Likert Scale. Bryman (2008, p. 146) identifies the Likert Scale as "*a multiple-indicator or multiple-item measure of a set of attitudes relating to a particular area*". The scale therefore provides the respondents with the opportunity to show their level of agreement with a statement which is based on a particular issue or theme (Bryman, 2008). For the purposes of this study, the use of the Likert Scale enabled the respondents to determine how they related to the constructs Capital, Career Management and Employability through providing a response to their feelings towards the variables for each scale.

As supported by Hair *et al.* (2011, p. 219), the use of an interval scale is beneficial to "*measure concepts such as attitudes, perceptions, feelings, opinions, and value through the use of rating scales. Rating scales typically involve the use of statements on a questionnaire accompanied by pre-coded categories, one of which is selected by the responded to indicate the extent of agreement or disagreement with a given statement*". The inclusion of a seven-point Likert Scale "*where 1 = strongly disagree to 7 = strongly agree*" was therefore adopted within the questionnaire with a midpoint of "*4 = neither agree nor disagree*".

As highlighted by Bryman (2008) when designing a questionnaire and using the Likert Scale, it is important to use statements as opposed to questions. This is so that respondents can indicate their level of agreement, which is scored accordingly depending on the level of agreement or disagreement. It is this level of agreement or disagreement, which is further evaluated within both the EFA and CFA data analysis.

Based on good practice, a pilot questionnaire (Appendix 3) was therefore distributed to a small group of non-random selected respondents, which in turn contributed to the internal validity of the questionnaire. Approximately 60 students were asked to

complete the questionnaire and 45 responded. This is a good response rate but this can be largely attributed to the fact the majority of the respondents were known to me. Whilst this is achievable for a small sample to facilitate a pilot study, it is not feasible to achieve a similar response rate for a larger sample particularly as a significant number of the respondents are not familiar with me or the study. The respondents for the pilot comprised of part-time students on both undergraduate and postgraduate studies at Northumbria University studying on business related and surveying programmes. The sample was selected based on being able to liaise with both students and colleagues undertaking a part-time programme of study. An email was sent to the sample to explain the purpose of the study, clarify that ethical approval had been obtained and requested their involvement. Through drawing on contacts to undertake this initial stage, qualitative comments contributed to the refinement of the questionnaire. Descriptive analysis of the data, in conjunction with carrying out a reliability analysis using SPSS, enabled the questionnaire to be finalised and distributed which subsequently formed Stage 1 of the data collection and analysis.

3.4.1.3 Selection of Constructs, Scales and Items

Based on the work of Williams *et al.* (2016) and the identification of the dimensions of employability being Capital, Career Management and Contextual, the constructs for the questionnaire for Stage 1 were subsequently titled the same. Four scales were included within the construct capital which were based on the work of Williams *et al.* (2016) being human, social, psychological and cultural capital. A further scale to be included was based on the work of Tomlinson (2017), who included identity as a form of capital. The questions posed in the questionnaire and within each construct and scale set are referred to as items (Hair *et al.*, 2018). It is these items, which measure the responses and provide the variables and data for the study. To reduce potential for ambiguity and to ensure the items represented the construct for analysis, questions from previous studies and validated measurement scales were utilised.

The items for the construct Capital are detailed in table 3.1 below:

<i>Human capital</i>	I am confident about my written communication skills for various audiences	Dacre Pool, Qualter and Sewell (2014)
	I have good planning and organisational skills	Dacre Pool, Qualter and Sewell (2014)
	I have become skilful in my subject specialism	Yorke and Knight (2007)
	My skills for doing the type of work I want to do are up to date	Wittekind (2010)
<i>Cultural and psychological capital</i>	I find it easy to get cooperation and support from others when working in a team within the workplace	Coetzee (2014)
	I can gain support from others for recommendations and ideas	Coetzee (2014)
	Students on my course are very much in demand	
	I find it important to develop myself in a broad sense, so I will be able to perform different tasks activities or jobs within an organisation	Van dam (2004)
	I have a very positive attitude to changes in my function	Van der Heigde and Van der Heijden (2006)
	I take action to develop my goals	
<i>Social capital</i>	I can use my professional networks and business contacts to develop my career	Rothwell and Arnold (2007)
	Prospective employers are eager to employ graduates from my university	Rothwell, Herbert and Rothwell (2008)
	The status of this university is a significant asset to me in job seeking	Rothwell, Herbert and Rothwell (2008)
	My chosen subject(s) rank(s) highly in terms of social status	Rothwell, Herbert and Rothwell (2008)
	I am able to build wide and effective networks of contacts to achieve my goals	Coetzee (2014)
<i>Career capital</i>	I have a future career direction that would be meaningful for me	Praskova, Creed and Hood (2014)
	I have chosen a career path that will give a purpose to my life	Praskova, Creed and Hood (2014)
	All I want to do now is to pursue the career that is inspiring me.	Praskova, Creed and Hood (2014)
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful	Praskova, Creed and Hood (2014)

Table 3.1 Scales and items associated with the construct Capital

The items associated with human capital link to skills, knowledge and attributes. Reference to skills is a common term within extant literature and the discourse of employability. Potentially, a part-time student may already possess the skills to fulfil their existing role if already employed but depending on their rationale and motivations to study, some part-time students may be looking to enhance their skills to change career or gain employment. To gain a better understanding of how part-time students therefore relate to the dimension of human capital, items relating to skills and knowledge were posed.

Social capital relates to both personal and business networks and Baker (2000) links this to employability. A part-time student who is working therefore may be able to draw on their existing networks to develop their employability or seek a career change. Likewise, those students seeking employment may be able to draw on their networks to obtain employment. Items relating to the dimension of social capital which evaluated opportunities to network were therefore selected to determine how part-time students relate to this concept.

During the pilot study, culture and psychological capital formed two individual scales. However, based on feedback from the pilot and analysis of the results there was an overlap in terms of the questions and some items were not considered representative of the scale. The valid items were therefore retained and combined to form the scale, culture and psychological capital. Questions relevant to this dimension relate to how a student perceives their position and functionality within a workplace. A number of items initially associated with these two scales related more closely to the dimension of career management and the questionnaire was therefore adapted accordingly to ensure that the items being explored were representative of the construct. It was evident from the pilot study that there was close association between capital and career management and this would be further explored as part of the findings and analysis during both Stage 1 and 2 of the study.

The final scale within the construct of Capital is based on the work of Tomlinson (2017) and reference to identity. This is largely based on how a student presents themselves for employment and how they form an identity within the workplace. Items relating to this scale set are therefore based on questions to determine a part-time student's perception of their career direction and focus.

The construct Career Management comprised of two scales within the pilot study referred to as self-management and signal management. Analysis of findings from the pilot and qualitative comments from the respondents identified close association between the two dimensions along with a number of items from the construct capital. The items for this construct were therefore combined to form an individual construct and comprised of questions relating to career direction, focus and goals and how students perceive themselves. This links to the work of Bridgstock (2009, p. 37) who

recognises how an individual perceives their “*values, abilities, interests and goals*” link to their self-management and thus the association with career management. The questions within this construct therefore build on the Career Management Model (Bridgstock, 2009) and systematic review of the conceptualisations of employability by Williams *et al.* (2016). The items utilised for the construct Career Management are presented in Table 3.2 below.

<i>Career management: signal and self-management</i>	I know where to find out information about jobs that interest me	Dacre Pool, Qualter and Sewell (2014)
	I know what I want to do when I finish my degree	Dacre Pool, Qualter and Sewell (2014)
	I know what is required from me to successfully secure the sort of work I want to do	Dacre Pool, Qualter and Sewell (2014)
	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person	Coetzee (2014)
	I am studying to fit my future career plan	Lee and Pang (2014)
	Preparing for my career is contributing to my personal growth	Praskova, Creed and Hood (2014)
	At this time, it is important for me to work at the job I prefer	Praskova, Creed and Hood (2014)
	I can explain the value of my experience to a potential employer	Dacre Pool, Qualter and Sewell (2014)
	I don't find it difficult to prove my capability to others	Wittekind <i>et al.</i> (2010)
	I can structure information in a way that meets the needs of my audience	Coetzee (2014)
	When I make plans for my career, I am confident I can make them work	Kossek <i>et al.</i> (1998)
	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful	Rothwell and Arnold (2007)
	When I decide to do something about my career, I go right to work on it.	Kossek <i>et al.</i> (1998)

Table 3.2 Scales and items associated with the construct Career Management

Both Capital and Career Management form independent variables within the dimensions of employability in that they depend largely on external forces such as labour market demand and self-perception in terms of how a student believes they meet the demand. In order to determine how the two variables of capital and career management relate to the employability of part-time students, a dependent construct called Employability was identified. Employability in this case is dependent on the conceptualisations of capital and career management but linked to the supply and demand for graduates. Two scales were therefore linked to this construct, the first

relates to demand and items relevant to the labour market and a student’s perception of how they could meet this demand. Self-perception formed the second scale and items relating to how an individual perceives their employability relative to market demand and level of suitability. This again links to the work of Williams *et al.* (2016) who included the dimension of “*Contextual*” such as external circumstances and the labour market, linking employability to supply and demand factors. The items included within the construct Employability are listed in Table 3.3 below:

<i>Demand and Self-perception</i>	In formulating my career goals, I take account of external market demand	Van der Heijde and Van der Heijden (2006)
	Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals	Van der Heijde and Van der Heijden (2006)
	I follow developments in the field of industry and employment regularly	Wittekind <i>et al</i> (2010)
	I am confident that I would find another job if I started searching	Wittekind <i>et al</i> (2010)
	I find it easy to quickly gain respect from others.	Coetzee (2014)
	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers	Rothwell and Arnold (2007)
	I know what kinds of work would suit my personality	Dacre Pool, Qualter and Sewell (2014)
	An employer would be impressed with my qualifications	Wittekind <i>et al</i> (2010)

Table 3.3 Scales and items associated with the construct Employability

The items listed in Tables 3.1, 3.2 and 3.3 therefore formed the questionnaire distributed during Stage 1 of the data collection process.

3.4.1.4 Sample Targeting and Sample Selection

As a member of the academic teaching team on part-time modes of delivery at Northumbria University, students enrolled on a part-time programme of study at the University were targeted to be included in the sample for the study. However, due to the anticipated low response rates commonly associated with survey questionnaires (Gray, 2017) and to secure a representative sample for multivariate analysis, the sample was extended further afield from Northumbria University. Two other institutions were therefore contacted and enquiries made to determine if they would be willing to take part. Teesside University also based in the North East of England is also a provider of part-time programmes. Although the overall student numbers at

Teesside are smaller than Northumbria, the two institutions have some similarities, particularly in terms of programmes and modes of study. Contact was therefore made with Teesside University to determine if they would be willing to form part of the sample for the study. A positive response was obtained and further to ethical approval detailed in Section 3.5 below, Teesside University was included in the sample.

In an attempt to generate a larger sample and due to Birkbeck University being involved in the initial scoping exercise during the design stage of the questionnaire, they also accepted the request to be included within the sample. Students from three universities, Northumbria, Teesside and Birkbeck therefore formed the sample for Stage 1 of the study. Consideration was given to include other institutions including the Open University but given the approximate number of part-time students at the participating institutions, a good response rate was anticipated. As the survey was distributed in May and close to the end of the academic year, consideration was also given to potential clashes with other survey questionnaires and the risk of students being saturated with requests to take part in other studies and online questionnaires. Teesside University clarified that the survey could not be distributed at the same time as the National Student Survey and this therefore influenced the timescales for the survey to be distributed. With the aim of targeting as many respondents as possible, the survey required distribution before the end of the academic year due to the survey being distributed by email to the respondents' university email addresses. Once the students completed the end of the academic year, a lower response rate was anticipated due to students potentially missing the email request. There was therefore a small window of opportunity in which to target the students at the participating institutions.

3.4.1.5 Methods of Dissemination and Data Capture

In order to disseminate the survey questions both for the initial pilot study and subsequent questionnaire, Jisc Online Survey Software was utilised in order to design and develop the questionnaire. The software enables the questionnaire to be constructed on the platform and a link created for distribution electronically. Once completed by the respondents, the software captures the responses and it is possible to track the number of responses. The pilot study took place between the 9th May and

18th May 2018. The refined questionnaire was subsequently distributed on the 21st May 2018 with a closing date of the 22nd June. Again, the Jisc Software was utilised to export the data collection to excel for further analysis using SPSS.

To reduce the risk of the respondents answering the questions according to their perceptions of sub-headings and constructs, a random approach was adopted in terms of the questionnaire design. The design of the questionnaire ensured that all questions had to be completed and responses could not be left blank. Demographic information such as gender, programme of study and age band were also included in the questionnaire.

The survey questionnaire was disseminated centrally by a lead contact at each participating institution to all part-time students. A total of 369 valid responses were received although as recognised by Bryman (2008) lower response rates can be expected with survey questionnaire. Nevertheless, 369 is considered by Hair *et al.* (2018) as an acceptable sample size for EFA to be undertaken.

The data captured during stage one of the study is further evaluated through the adoption of EFA. This form of multivariate analysis provides the opportunity to reduce the large the number of variables and identification of components, which are correlated and better represent the underlying factors. The findings and analysis for this stage of the study are expanded on in Chapter 4 of this thesis. An explanation and rationale for this this method of analysis is however, detailed below.

3.4.1.6 Methods of Analysis – Stage 1

A sample overview and distribution of the responses are expanded on further within Chapter 4 alongside a detailed explanation of the method of data analysis. EFA explores the correlation between the individual items, also referred to as variables within the data set and analysis of the outputs to identify patterns of correlation amongst the variables (Tabachnick and Fidell, 2013). The literature review identified a number of variables which contribute to the conceptualisations of employability but through the identification of latent relationships and variables being combined into a smaller range of factors, the data is simplified (Hair *et al.*, 2011). Through utilising EFA within this study, the correlations between the individual items therefore reflect

the conceptualisations and dimensions of the employability, which part-time students relate to the most.

Factor analysis is therefore a data reduction technique which determines how data from a large set of variables can be reduced and summarised within a smaller set of factors or components (Pallant, 2015). Phase 1 of the data collection for this study comprised of a number of scale items and questions taken from extant studies. EFA enables the scale items and questions to be refined to form a coherent set of subscales on a smaller scale.

The process of factor extraction requires an exploratory approach in order to balance the intention to reduce the number of variables whilst also ensuring that the variance from the original data can still be explained (Pallant, 2013). Factor extraction therefore determines “*the smallest number of factors that can be used to best represent the interrelationships among the set of variables*” (Pallant, 2013, p. 190). A satisfactory solution is therefore determined from experimenting with the number of factors (Tabachnick and Fidell, 2013). The Kaiser’s Criterion, scree test and parallel analysis are three techniques suggested by Pallant (2013) to facilitate the decision making process of how many factors to retain. This is explained and demonstrated in Section 4.0.

To identify commonalities in the relationships between the variables, simplify, and reduce the number of factors, the statistical technique of EFA was adopted. As explained by Cohen, Manion and Morrison (2018, p. 181) EFA seeks to explore underlying patterns, groups and clusters from “*previously unknown groupings of variables*”. The technique identifies factors through exploring data patterns and latent relationships and can be used as a data reduction method (Hair *et al.*, 2011). Hair, Black, Babin and Anderson, (2010, p. 91) explain factor analysis as a method to “*examine the underlying patterns or relationships for a large number of variables and to determine whether the information can be condensed or summarized in a smaller set of factors or components*”. A separate EFA was undertaken for each component area, the findings and analysis of which are discussed further in Chapter 4.

3.4.1.7 EFA Results and Factorability of the Data

The interpretations and analysis of the scaled items are detailed in the appendices but summarised below. The first factor analysis considered the independent variable relating to Capital, largely based on the conceptualisations presented by Williams *et al.* (2016) and Tomlinson (2017). Variables relating to human, social, psychological, cultural and graduate capital formed the basis of initial enquiry. The second factor analysis also considered independent variables but these related to Career Management and the work of Bridgstock (2009) and concepts aligned to both self and signal management based largely on the work by Hillage and Pollard (1998). The third factor analysis evaluated Employability as a dependent variable which includes items relevant to the labour market and demand and how an individual views themselves in terms of their capability to navigate their career.

Both forms of factor analysis in terms of exploratory and confirmatory have been used within this study. Exploratory was utilised at the first stage to explore the inter-relationship amongst the set of variables (Pallant, 2015). Based on the outputs from stage one of the data findings and analysis using EFA, a conceptual model has been developed which will be further evaluated through CFA and SEM. As identified by Pallant (2015, p. 188), CFA is used to test specific hypothesis and / or theories relating to “*the structure underlying a set of variables*”. Tabachnick and Fidell (2013, p. 614) explain EFA as a method to “*describe and summarize data by grouping together variables that are correlated. The variables themselves may or may not have been chosen with potential underlying processes in mind*” and “*provides a tool for consolidating variables and for generating hypotheses about underlying processes*”. EFA is concerned with developing theory whereas CFA tests theory (Hair *et al.*, 2011). The authors further explain the process of measurement which “*involves specifying the variables that serve as proxies for the concepts (construct). A proxy is a variable that represents a single component of a larger concept, and, taken together, several proxies are said to measure a concept*”.

As illustrated in the literature review, numerous models and frameworks have been posited which consider employability. It is, however, viewed that whilst aspects of such models are relevant for all students regardless of mode of study, there is a general gap in terms of a model of employability which considers part-time students

and their career preparedness. The design of the questionnaire for this study therefore encompasses existing models and frameworks with a view to building on existing studies and frameworks to determine how current conceptualisations can be adapted to present a model of employability which focusses on part-time students. It is evident from a review of the literature that there are a number of models relating to employability although these appear more relevant for full-time students with little or no empirical assessment of how these relate to part-time students. The existing models and frameworks do however offer a number of validated scales and items which assess various constructs. The questions from existing validated measurement instruments have therefore informed the survey instrument which underpins this stage of the study. A copy of the initial questionnaire for Stage 1 of the study is attached at Appendix 4.

The measurement scales were developed from literature and empirical studies identified within Chapter 2. Hair *et al.* (2011, p. 215) explains: “*A scale is a measurement tool that can be used to measure a question with a predetermined number of outcomes*”. The predetermined outcomes also referred to as concepts or constructs are therefore the measurement items, which are established from the literature and summarised in Appendix 3. The questions were determined from existing scale sets and categorised accordingly based largely on the work of Williams *et al.* (2016). The conceptual headings were determined as Capital, Career Management and Contextual. However, as there is a cross over between the subsections, EFA allowed the commonalities of the items to be explored further to develop a model for further investigation as Stage 2 of this study.

A solution to interpret the variables without changing the underlying properties is undertaken by rotating the factors. As explained by Tabachnick and Fidell (2013) either the orthogonal or the oblique technique can be adopted to undertake this process. Field (2000) explains the orthogonal technique as being “*unrelated, and in this context it means that we rotate factors whilst keeping them independent*” whereas oblique rotations enable the factors to correlate. Correlates means having a mutual relationship or connection, in which one thing's effects or depends on another (Field, 2000). As further explained by Field (2000, p. 439) the “*choice of rotation depends on whether there is a good theoretical reason to suppose that the factors should be*

related or independent". Field continues to clarify that "*an oblique rotation should be used only if there are good reasons to suppose that the underlying factors could be related in theoretical terms*". Cohen *et al.* (2018, p. 822) also states direct oblimin should be used "*if the researcher believes that there may be correlations between the factors (an oblique, correlated) rotation*". Oblique rotation was therefore selected on the basis that the independence between the factors could not be assumed. This is due to the close correlation of the theories within extant studies such as the close association between human, psychological, social and cultural capital and close association with career management. Therefore, whilst no a priori hypotheses have been set in terms of the potential inter-relations, the aim of the EFA is to evaluate the current conceptualisations on the assumption that they could be correlated. To enable this relationship to be determined, oblique rotation was therefore selected as opposed to an orthogonal rotation method, which would have assumed the factors were independent. A separate EFA for each of the construct areas under consideration was carried out. Field (2018) confirms the use of Principal Axis Factoring, Varimax rotation and Kaiser Criterion (eigenvalues >1) for factor extraction for each case, with Bartlett Test of Sphericity and Kaiser-Meyer-Olkin (KMO) for assessment of data factorability.

A number of steps are incorporated within the process of factor analysis and when determining the factorability of the data. The first stage of the process after the initial rotation is to consider the correlation matrix where at least some of the results should have correlations of '*r*' being equal to, or greater than 0.3 (Hair *et al.*, 2010). This also requires consideration alongside the Bartlett's Test of Sphericity where '*p*' should be less than 0.05 in order for the results to be statistically significant. The KMO is also analysed and is considered acceptable if it is 0.6 or above (Hair *et al.* 2010). These three determinants required evaluation before proceeding further with the factor analysis. If the factors fail to meet these requirements it might not be appropriate to continue with the factor analysis. These statistical measures are therefore considered within the EFA within this study with each test being repeated for each extraction and explained in Chapter 4.

Stage 1 of the data analysis concludes with a conceptual framework which synthesizes the existing view and responses from the data. As explained by Imenda

(2014, p. 189) a conceptual framework “*essentially represents an integrated way of looking*” and can be “*defined as an end result of bringing together a number of related concepts*”. The research methodology and methods associated with Stage 1 of the study therefore identifies a number of related concepts which provide a valid and reliable measurement tool for use in Stage 2, the purpose of the second stage of the data collection and analysis being to test the theories identified from Stage 1 and identify a model of employability for part-time students.

3.4.2 Research Design Stage 2

The second stage of the study comprises of CFA and SEM. The findings and analysis for this stage are detailed in Chapter 5.0 but an overview of the research method and design is described below.

Hair *et al.* (2018, p. 660) explains that CFA is “*a way of testing how well a pre-specified measurement theory composed of measured variables and factors fits reality as captured by data*”. Whereas in EFA variables are loaded onto factors which represent best fit and identifies the number of factors to retain, in CFA the number of factors are loaded first. Hence, in EFA, it is exploratory to identify the number of factors whereas it is confirmatory in CFA through specifying the number of factors prior to analysis. CFA thereby “*tests the extent to which a researcher’s a priori, theoretical pattern of factor loadings on pre-specified constructs (variables loading on specific constructs) represent the actual data*” (Hair *et al.* 2018). CFA is therefore the technique to test a measurement theory, the validation of which enables SEM and the final stage of the research study.

SEM comprises a statistical methodology, which through hypothesis testing takes a confirmatory approach to data analysis (Byrne, 2016). The conceptual framework determined from Stage 1 through the application of EFA therefore contributes to the second stage of the study whereby the validated measurement tool can be utilised and distributed to the second sample to test the theory. The revised measurement tool takes the form of the substantive questionnaire (Appendix 5). The refinement of the scales from the exploratory stage therefore contribute to the testing of the theory.

Hair *et al.* (2018) identifies six stages to SEM as illustrated in Figure 3.2 below:

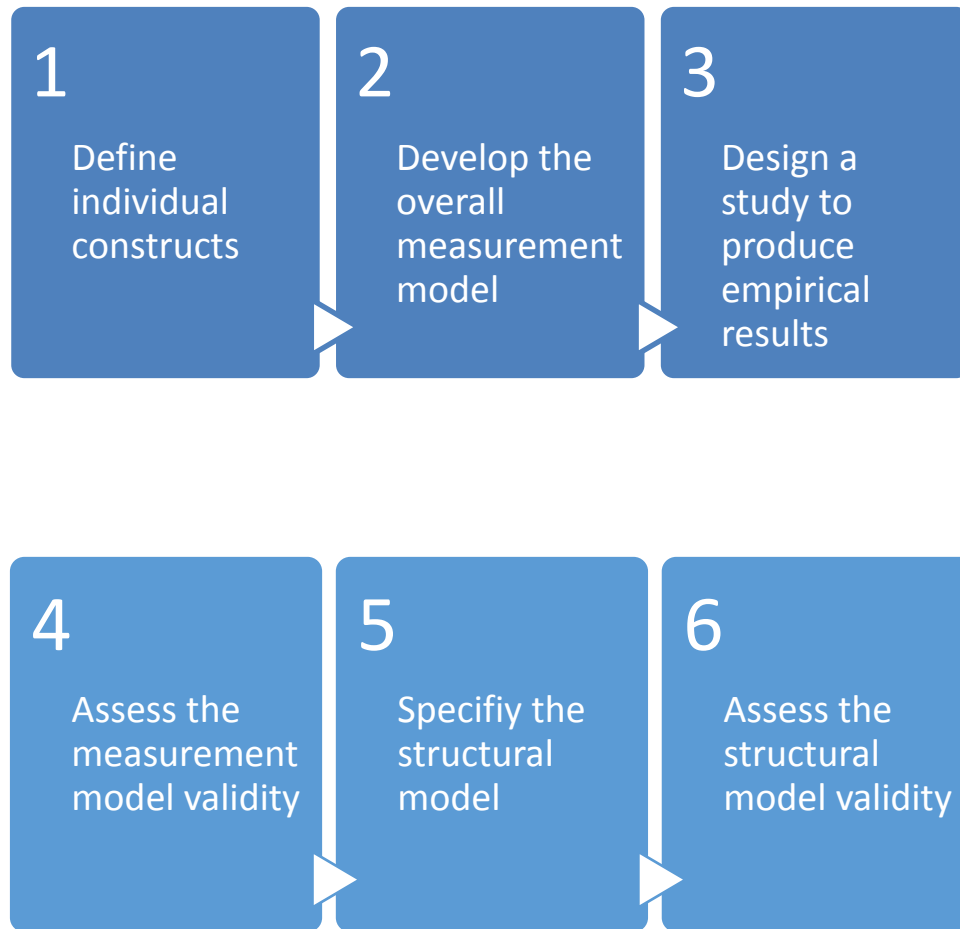


Figure 3.2 Stages of SEM based on Hair *et al.* (2018, p. 625)

Stage 1 SEM therefore requires the measurement theory in terms of constructs to be defined. The exploratory stage of the study through the application of EFA contributed to the development of valid measurement scales to obtain further responses and test the theory. The selection of the scales for use in hypothesis testing is paramount as explained by Hair *et al.* (2018, p. 627), “*how the researcher selects the items to measure each construct set the foundation for the entire remainder of the SEM analysis*”. The scoping exercise, pilot study and EFA therefore contributed to the development and refinement of the constructs for the substantive study, which forms Stage 2 of the research. As suggested by Hair *et al.* (2018) a pre-test with respondents from a similar population demonstrates good practice and allows the screening of the items and identification of potential issues. As previously discussed,

a pilot study was undertaken to screen the initial set of scales and items, the outcome of which resulted in the initial refinement of the questionnaire for the application of EFA. The method and findings from this stage are expanded on in Chapter 4.

The second stage as detailed in Figure 3.2 requires the development of the measurement model. Hair *et al.* (2018, p. 627) states, “*In this stage, each latent construct to be included in the model is defined and the measure indicator variable (items) are assigned to the corresponding latent constructs*”. The validity and unidimensionality of the constructs are addressed during this stage, even if using well-established scales (Hair *et al.* 2018). Chapter 5 discusses the findings and analysis for this stage.

The measurement model used in CFA stage along with the same sample of respondents can be utilised in the structural model (SEM). Therefore, the third stage in the process suggested by Hair *et al.* (2018) comprises the design of a measurement model, which will produce empirical results. The design of the structural model in this study is therefore based on both the EFA and CFA to ensure the factors can be analysed. It is important to ensure that there is no missing data from the sample as Hair *et al.* (2018) predicts this could impact on the results. The design of the survey questionnaire considered this prior to distribution and it was therefore not possible for the respondents to leave any statements blank. This therefore addressed this issue and was not a cause for concern during the analysis. The sample size also met with the recommendations in order to allow the model to run. The model presented in Chapter 5 therefore satisfies the requirements suggested by Hair *et al.* (2018) to facilitate further analysis.

Stage 4 is a critical stage where the validity of the measurement model is assessed. Hair *et al.* (2018) explains that the validity of the model is determined by the goodness-of-fit and construct validity. The goodness-of-fit identifies “*how well the specified theoretical structure represents reality as represented by the data*” (Hair *et al.* 2018, p. 635). The measures associated with this are explained in Chapter 5. The fifth stage comprises the specification of the structural model which involves the assignment of relationships between constructs. Hair *et al.* (2018, p. 643) simplifies this and states “*the researcher identifies the dependence relationships that are*

hypothesized to exist among the constructs, and each hypothesis represents a specific relationship that must be specified". Therefore, the hypotheses redefined from the CFA are tested through the use of SEM to determine which relationships have a positive and significant relationship.

Stage 6 in the process suggested by Hair *et al.* (2018) concludes with assessing the validity of the structural model. This again, relates to assessing the goodness of fit measures alongside identifying "*whether the structural relationships are consistent with theoretical expectations*" (Hair *et al.* 2018, p. 715), the outcome of which enable further discussions and conclusions to be drawn from the study.

3.5 Ethical Considerations

An essential element of any research is to consider the ethical implications associated with the research. Prior to undertaking any form of primary data collection, a number of ethical issues require consideration. Gray (2017, p. 72) identifies that collecting research extends further than just adopting an appropriate research methodology and that research must be conducted in a "*responsible and morally defensible way*". Flick (2015) acknowledges that the research undertaken should avoid causing harm, people should be treated equally and their values and decisions respected. Interestingly, Flick (2015) also recognises that the research should be of benefit. Furthermore, any research undertaken must also comply with the University's Ethics Policy.

Ethical approval was therefore sought from Northumbria University prior to undertaking any form of data collection. An application for ethics approval was submitted and approved by Newcastle Business School Ethics Committee in January 2017. Due to a proposed change to the method of data collection, an amended application superseded the original approval with the revised consent being approved in March 2018. Organisational consent was also sought from both Teesside and Birkbeck University. A copy of the ethics approval forms are at Appendix 1.

Whilst organisational consent has been approved, it is also important to ensure consent is forthcoming from the respondents. Firstly, participation in the research should be on a voluntary basis and informed consent obtained. The data collected for

this study was via an online questionnaire distributed by email. The respondents could therefore self-select as to whether they wished to take part and could delete the request if they did not wish to contribute to the study. The opening page to the survey for both stages invited the students to take part and the purpose of the study and how the information would be used was explained. Anonymity was reinforced and it is not possible to identify the respondents other than the place and programme of study. This data was however only collected for sampling purposes to determine the demographics of the respondents. The respondents' involvement was therefore voluntary and they were informed of the purpose of the study and how the information would be undertaken. A statement concerning ethics was also included to demonstrate that the study met with the University's ethics policy and by completing the online questionnaire, they were providing informed consent for their responses to be included (Appendix 1). The respondents could withdraw from the questionnaire at any time. Confidentiality was also assured due to the responses being anonymous and via an online platform. Access to the platform was password protected and the individual identity of those involved in the study cannot be determined. Flick (2015) reinforces the importance of assuring confidentiality, anonymity and data protection and these important considerations were therefore given due consideration in the design of the study and method of data collection.

3.6 Research Strengths and Limitations

Questionnaires can prove problematic as a method of data collection due to low participation rates (Gray, 2017) and this posed a potential limitation in this study. The response rate was significantly lower from one institution and this is expanded on in Chapter 5. One HEI indicated that students can suffer '*survey fatigue*' and again this created a limitation particularly in terms of timing and length of the questionnaire.

Gray (2017) reinforces that survey questionnaires which are too long could dissuade respondents. To counteract this potential limitation, the pilot study provided valuable qualitative feedback and the length of the questions and overall questionnaire formed part of this feedback. This afforded the opportunity for the questionnaire to be amended and a number of ambiguous questions omitted. The careful design of the questionnaire in terms of undertaking the initial scoping exercise and pilot study is

therefore a strength of the research design as it provided an opportunity to reflect and refine the survey design.

A strength of the research design is the incorporation of validated scales from earlier studies. Gray (2017, p. 380) suggests the use of validated measurement scales is a better approach to adopt due to the “*internal consistency*” as confirmed by reporting the Cronbach alpha of the scale. A number of scales taken from academic journals were incorporated within this study in order to utilise validated scales and minimise the potential for ambiguity through the design and development of new scales. Furthermore, as this study aims to measure how part-time students relate to the antecedents of employability, it is justifiable to use existing conceptualisations. The use of existing scales therefore reduces any potential bias, which could inadvertently exist and allows the research to be more objective (Gray, 2017).

CHAPTER FOUR

Stage 1 Data Findings and Analysis

4.0 Chapter Overview

From the extant literature review, it was evident that a number of variables and perspectives align to the concept of employability. As detailed in Chapter 3, based on existing validated and measurement scales from previous studies, an initial scoping exercise and pilot study, a questionnaire was developed and distributed to a sample of part-time students. The purpose of this questionnaire was to evaluate how part-time students relate to the antecedents of employability with the aim of identifying a model to enhance their career readiness. The employment of EFA to analyse the data findings contributed to the development of the conceptual model, posited at the end of this chapter. The conceptual model thereby contributes to the second stage of the study to further test the model through the employment of CFA and SEM. This will be explained and discussed in Chapter 5. This chapter will therefore detail the first stage of the data findings and analysis before concluding with the presentation of the conceptual model and hypotheses for further testing and analysis.

4.1 Findings and Analysis

4.1.1 Stage 1 - Survey Questionnaire

The questionnaire for self-completion was issued electronically to three HEIs who subsequently forwarded it by email to their part-time students on undergraduate and postgraduate programmes of study. From approximately 5800 potential respondents who accepted the invitation to complete the survey on-line, 369 respondents fully completed the questionnaire and submitted it via the on-line survey portal. Lower response rates can be expected (Flick, 2015) when utilising a questionnaire and this is a limitation of adopting this method. As one institution reported, students can suffer with '*survey fatigue*', this posed a potential issue in terms of securing both institutions to take part in the study, and ensuring respondents completed the survey. Further limitations to adopting a questionnaire for data collection relate to the length of the survey and respondents' lack of interest in the subject area; competing activities and pressures of time, or missing information (Cohen *et al.*, 2018). To improve overall participation with the study and determine an initial response and identification of any initial errors, a pilot was undertaken prior to the distribution of

the main survey questionnaire. This pilot enabled initial face validity checks to be undertaken and qualitative feedback to be provided. As detailed in Chapter 3, the pilot study contributed to the refinement of the questionnaire. Whilst a relatively low response rate exists, there was a high level of absolute response in that the questionnaires were fully completed and all responses could be utilised in the subsequent findings and analysis.

Although validated measurement scales and items from earlier studies contributed to the development of the survey questionnaire, it is highly probable that the original measurement structure may not equally apply to the demographics of part-time students. The validity and generalisability of the measurement scales within the setting of part-time students can therefore be measured objectively by means of EFA. The factor analysis evaluates all item responses towards the dependent and independent variables and a validated measurement tool can be developed through the use of EFA. The outcome of this was the development of a measurement tool and hypotheses which as detailed in Chapter 5, can be empirically tested through the application of CFA and SEM.

The literature review identified numerous dimensions, which are related to the antecedents of employability. A systematic review undertaken by Williams *et al.* (2016) categorises three key dimensions as Capital, Career Management and Contextual. This study thereby takes an integrative approach to employability and examines the perceptions of part-time students relative to Capital (human, social, psychological, cultural), Career Management (self-management and signal management) and the overall context which includes the demands of the labour market and self-perceived employability. Graduate identity is also examined within the analysis, which has been posited by Tomlinson (2017) as a further conceptualisation of employability in terms of graduate capital. A-priori hypotheses and assumptions about underlying facts for each dimension are therefore not included within this stage of the primary data collection and analysis.

4.2 Demographic Profile of the Respondents

Whilst there are limitations of distributing a survey, there are also advantages particularly in terms of being able to include a wider geographic range along with avoiding interview bias (Bryman, 2008). To ensure generalisability of the findings to the population, it is important to ensure a representative sample is obtained (Cohen *et al.*, 2018). The main benefit of utilising a questionnaire in this study has been the ability to obtain data from a variety of programmes and from different institutions.

The profile of the respondents is summarised in Table 4.1 below.

Demographics	Number	% (total)
Gender		
Male	182	49.3%
Female	184	49.9%
Rather not to say	3	0.8%
Age Group		
18-24	86	23.2%
25-34	127	34.4%
35-44	81	22.0%
45-54	56	15.2%
55-64	15	4.1%
65 and over	2	0.5%
Rather not to say	2	0.5%
Average annual pre-tax personal income		
Less than £9,999	30	8.1%
£10,000 to £19,999	91	24.7%
£20,000 to £29,999	99	26.8%
£30,000 to £39,999	70	19.0%
£40,000 to £49,999	32	8.7%
£50,000 to £59,999	22	6.0%
£60,000 or more	2	0.5%
Prefer not to answer	23	6.2%
Institution		
Northumbria University	213	58.0%
Teesside University	137	37.0%
Birkbeck University	16	4.0%
Not specified	3	1.0%
Programme of Study		
Undergraduate	144	39.0%
Postgraduate	164	44.4%
Certificate/Diploma of HE	16	4.3%
Postgraduate Certificate	9	2.4%
Postgraduate Diploma	11	3.0%
Degree Apprenticeship	25	6.8%
Employment Status		
Working full-time (35hrs or more per week)	263	71.3%
Working part-time (between 8 & 34 hrs per week)	72	19.5%
Working less than 8hrs per week	8	2.2%
Temporarily unemployed - actively seeking work	13	3.5%
Temporarily unemployed -not currently seeking work	4	1.1%
Retired	3	0.8%
Permanently unemployed / unable to work	5	1.4%
A full-time carer (home / family)	1	0.3%
Total number of responses (per section)	369	100%

Table 4.1. Profile of Respondents

As demonstrated in the results, an equal distribution of both male and females took part in the study. In term of age group, the highest percentage of respondents are in the age group between 25-34 contributing to 34.4% of the responses with both age groups either side of this representing 23.2% for the age group 18-24 and 22.5% for age groups 35 to 44. This represents that 79% of the respondents were in the age range of 18 to 44 and 71.3% of the respondents working full time. In terms of the level of study postgraduate students contributed to 44% of the responses and undergraduates make up 39% of the total respondents. 6.8% of the responses were from students undertaking a degree apprenticeship. Whilst this is significantly lower than both undergraduate and postgraduate students, it can be expected given the relatively new nature of degree apprenticeships offered by the institutions compared with other programmes of study.

The aim of the questionnaire was to collect a representative sample which was inclusive of all age groups and modes of study and the demographics of the respondents demonstrates a range of programmes, age groups and that the majority work full-time. Bennion *et al.* (2011) identified the diverse nature of part-time students and recognised that some will be seeking employment as opposed to those already working and looking to upskill and enhance their career. The profile demonstrated that 13 respondents were temporarily unemployed and actively seeking work. Whilst less than the number of respondents working either full or part-time, the profile demonstrates a demographic profile which captures a range from those who are perhaps seeking a new job or pursuing a different career or move into employment.

The profile of the respondents also relates to the earlier work of Swain and Hammond (2011) who identify part-time students can have both intrinsic and extrinsic motivations to study and highlight that a retiree may be undertaking a formal qualification for enjoyment. The profile demonstrates that 5 respondents fell into the category of being retired and whilst these only made up 1.4% of the total responses, this reinforces that the motivational factors will differ which in turn contributes to the challenges HEIs face in developing employability strategies which will support part-time students regardless of their intrinsic or extrinsic motivational factors.

In terms of salary 59.6% of the respondents earned up to £29,999 per annum with 24% of this total earning less than £19,999. Statistics issued by the Department for Education (2019) identified a gap in median salaries of £10000 between graduates and non-graduates in 2018, with the average salary for a graduate being £34,000. This demonstrates that 59.6 % of the respondents who took part in this study earned less than the median salary for a graduate.

The screening criteria used in the study reflects the target population in that all students who completed the questionnaire are considered part-time students. The employment status demonstrates that the majority are in fact working full-time whilst studying or working on a part-time basis. A percentage of respondents, 4.6% are unemployed although 3.5% of these reported they were seeking work. As identified above, a small representative sample is retired and / or unable to work.

To summarise, the demographic profile of the respondents demonstrates a diverse range of part-time learners and the sample therefore has broad coverage for potential generalisability in terms of the age and employment status. This links to the earlier work of Callender (2011, p. 471) who identifies part-time students as a “*very diverse group*”. To ensure that a diverse range was captured and to extend the geographical area beyond Northumbria, respondents from another regional institution and one from central London were included in the sample. The majority of the participants who completed the survey comprised of Northumbria students. This could partly be due to being able to promote the survey more actively within Northumbria as opposed to Birkbeck and Teesside where there was less opportunity to support the completion of the survey.

4.3 Method of Analysis - Exploratory Factor Analysis

In this exploratory stage of the study, it is not the intention to generalise to the wider population, but to use the sample to identify and define potential factors inherent in the data. As such, principal component analysis (PCA) was employed as the method of factor extraction (Cohen *et al.*, 2018). Principal component analysis is “*concerned only with establishing which linear components exist in the data and how a particular variable might contribute to that component*” (Field, 2000, p. 433). The method of EFA is considered a psychometrically sound method (Field, 2000).

Based on an evaluation of the literature and building on the work by Williams *et al.* (2016); Tomlinson (2017) and Bridgstock (2009) three factor analyses are explored within the first stage of the study, namely, Capital, Career Management and Employability, the latter being the overall context. Measurement instruments for capital were taken from existing validated scales sets, including amongst others the work of Yorke and Knight (2007); Van der Heijde and Van der Heijden (2006) and Rothwell *et al.* (2007). These items are therefore adopted in the first factor analysis and form the basis of the first independent set of constructs.

Building on the work of Bridgstock, Career Management forms the second factor analysis and the measurement instruments have again been taken from existing validated scales namely the work of Dacre Pool *et al.* (2013) and Lee and Pang (2014). Career management therefore forms the second independent set of constructs.

The final factor analysis considers Employability as the dependent variable and the measurement instruments have been utilised and include the work of Wittekind (2010) and Rothwell and Arnold (2007). A full list of the items and corresponding authors are as detailed in Chapter 3.0, Tables 3.1, 3.2 and 3.3.

The process of interpreting the output of factor analysis within Stage 1 of this study is largely based on the methodology and processes explained by Pallant (2013) and Hair *et al.* (2010) and as summarised in Figure 4.1. The following sections of this chapter therefore justify and analyse each construct accordingly on the basis of the criteria detailed in Figure 4.1.

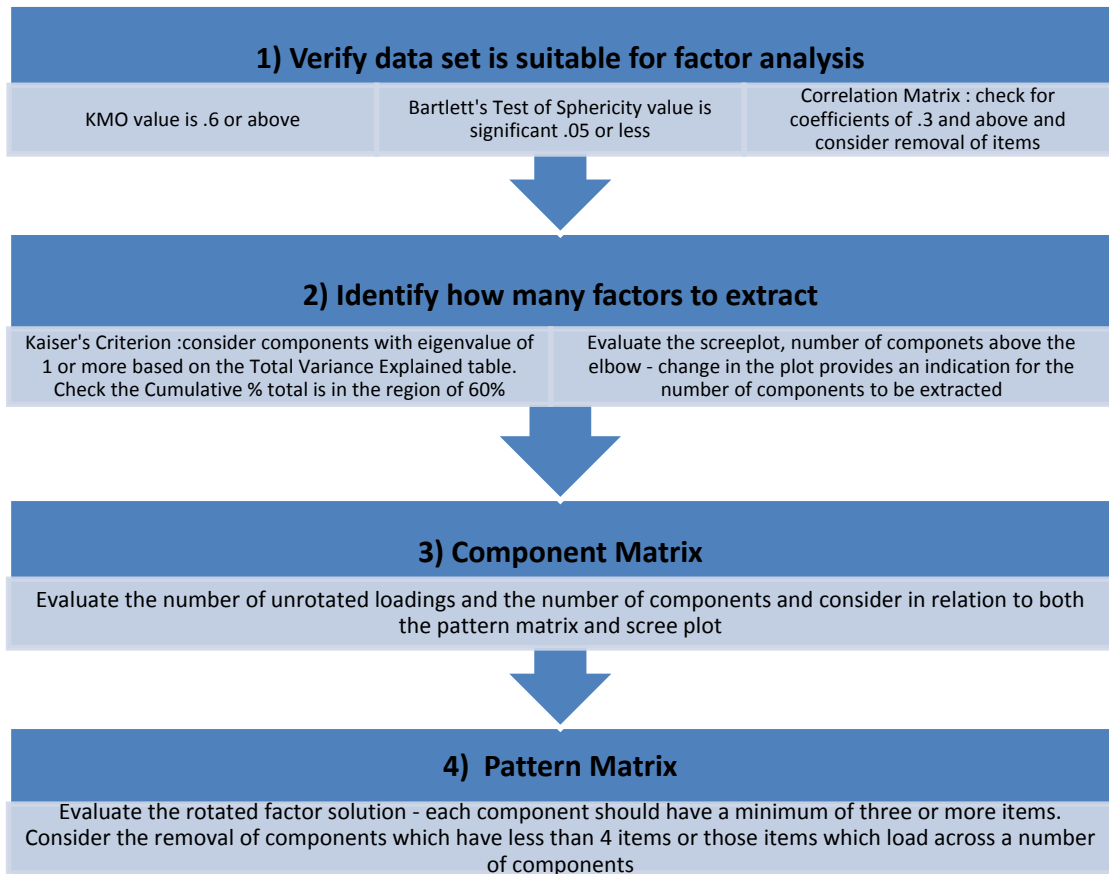


Figure 4.1 – Diagram to summarise interpretation of factor analysis – Stage 1

4.3.1 Factorability of the data

Preliminary analysis of the data indicated that the Bartlett Test of Sphericity is significant at the 0.1% level of significance ($p < 0.000$) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is good at 0.860 and exceeds the acceptable level of 0.50 for capital data variables. Factorability is therefore assumed. Four initial constructs from this dimension have been reduced to three factors within this factor extraction. Section 4.5.1 below explains the items eliminated from this initial analysis. The three factors represent 57.253%, which is considered acceptable and close to the minimum suggestion variance of 60% (Hair *et al.*, 2010). Whilst it would be possible to improve the overall variance by omitting additional items, this would reduce the number of items from four to three for some of the constructs. According to Tabachnick and Fidell (2007), a factor with less than three items is considered weak. On this basis, four items per scale have been retained to ensure each construct can be tested further during the second stage of the study.

Preliminary analysis of the data indicated that the Bartlett Test of Sphericity is significant ($p=0.000$) and the KMO measure of sampling adequacy is good at 0.884 and exceeds the acceptable level of 0.50 for the career management data variables. Factorability is therefore assumed. A three-factor solution explains a total of 58.021% of the total variance which was considered acceptable based on the decision to retain 4 items per construct. Items eliminated from this analysis are explained in Section 4.5.2 below.

Preliminary analysis of the data indicated that the Bartlett Test of Sphericity is significant ($p=0.000$) and the KMO measure of sampling adequacy is good at 0.814 and exceeds the acceptable level of 0.50 for the dependent data variables relating to employability. Factorability is therefore assumed. The two-factor solution explains a total of 58.220% of the variance and as explained above, this represents an acceptable level. One item was eliminated, the justification provided in Section 4.5.3 below.

Table 4.2 summarises the preliminary analysis and findings for each variable.

Variables:	Factors	KMO	Significance (p)	% Variance
Independent Variables <i>Capital</i>	3	0.860	0.000	57.253
Independent Variables <i>Career Management</i>	3	0.884	0.000	58.021
Dependent Variables <i>Employability</i>	2	0.814	0.000	58.220

Table 4.2 Factor analysis summary table

4.3.2 Factor Extraction

The number of factors to retain for each variable is detailed in Table 4.2 above. The retention and determination of how many factors to retain is based on a number of considerations. The Kaiser Criterion also referred to as the eigenvalue rule, suggests only factors which have an eigenvalue of 1.0 are maintained for further evaluation (Pallant, 2013). However, as acknowledged by Pallant (2013) this can result in too many factors being retained and therefore caution needs to be exercised including the adoption of other techniques when determining the number of factors to retain. The scree test plots the eigenvalues of the factors and this provides an indication in determining how many factors to be retained (Cohen, 2018). Pallant (2013, p. 191)

refers to the earlier work of Cattell (1966) and explains that where the “*shape of the curve changes direction and becomes horizontal*” this provides an indication. The number of factors above the elbow and change in the curve thereby indicates the number of factors to be retained and explains the variance in the data set.

Hair *et al.* (2010, p. 117) identifies “*a factor loading represents the correlation between an original variable and its factor*” and further highlights that a factor loading of 0.50 is recommended for a sample size of 120. Within this study however, a factor loading of 0.30 could be considered acceptable due to the sample size being 369. As the aim of factor analysis is to reduce the number of variables in a meaningful way in order to evaluate which component dimensions cluster together best (Field, 2001), the variables with the lowest loadings have been eliminated. The removal of such variables has been considered alongside the interpretation of the communalities, variance and pattern matrix and is further explained within the findings and analysis.

4.4 Analysis and Interpretation of the EFA

Principal component analysis considers the factor extracted. Interpretation of the number of factors to retain is based on a number of considerations. The eigenvalue and the scree plot can be used within this interpretation. Field (2000, p. 436) based on the earlier work of Cattell (1966b) suggests, “*The cut off point for selecting factors should be at the point of inflexion*” in terms of the curve. On the scree plot where the slope of the curve becomes more level therefore provides an indication of the number of factors to be retained.

Whilst Field (2000) recognises scree plots as being “*very useful*” in terms of factor selection, it is recognised that the decision of which factors to be retained cannot be based on this alone. Field (2000) acknowledges the earlier theories of Kaver (1960) in that factors with an eigenvalue of greater than 1 should be retained, “*this criterion is based on the idea that the eigenvalues represent the amount of variation explained by a factor and that an eigenvalue of 1 represents a substantial amount of variation*” (Field, 2000, p. 437).

4.5 Interpretation of Outputs - Factor Rotations

4.5.1 Capital

The first factor extraction considered nineteen items which related to the construct of Capital and were evaluated through the use of IBM SPSS Statistics 25 and principal component analysis. The purpose of undertaking this analysis is to determine a small number of factors which “*best represent the interrelationships among the set of variables*” (Pallant, 2013, p. 190).

Suitability of the data for factor analysis was first assessed via analysis of the correlation matrix which demonstrated a number of coefficients of 0.30 and above. The initial KMO was 0.871 which exceeded the recommended value of 0.60 and the Bartlett’s Test of Sphericity demonstrated statistical significance. The data was therefore considered suitable to support the factorability of the correlation matrix.

The PCA identified the presence of five components with eigenvalues exceeding 1, explaining 29.9%, 8.7%, 7.2%, 6.4% and 5.5% of the variance respectively providing a total cumulative % of 57.793. Hair *et al.* (2010, p. 109) suggests “*a solution that accounts for 60 percent of the total variance (and in some instances even less) as satisfactory*”. The total variance at this first attempt of factor extraction is therefore slightly lower than the suggested amount of 60% but considered acceptable.

For ease of reference the reference numbers for each component are summarised in table 4.3 below. Assessment of the communalities table identified two components being items C2 and C7 as having a factor loading of less than 0.50. Hair *et al.* (2013) recognises that for larger samples, smaller factor loadings can be considered acceptable and based on the sample size for this study, a factor loading of 0.30 could be considered significant. However, based on the common variance and analysis of the scree plot, component and pattern matrix tables, item C7 was omitted and the factor analysis process subsequently repeated.

REFERENCE	COMPONENTS - CAPITAL
C1	I am confident about my written communication skills for various audiences (C1)
C2	I have good planning and organisational skills (C2)
C3	I have become skilful in my subject specialism (C3)
C4	My skills for doing the type of work I want to do are up to date (C4)
C5	I find it easy to get cooperation and support from others when working in a team within the workplace (C5)
C6	I can gain support from others for recommendations and ideas (C6)
C7	I take action to develop my goals (C7)
C8	I find it important to develop myself in a broad sense, so I will be able to perform different tasks activities or jobs within an organisation (C8)
C9	I have a very positive attitude to changes in my function. (C9)
C10	I can use my professional networks and business contacts to develop my career (C10)
C11	Prospective employers are eager to employ graduates from my university (C11)
C12	The status of this university is a significant asset to me in job seeking (C12)
C13	My chosen subject(s) rank(s) highly in terms of social status (C13)
C14	I am able to build wide and effective networks of contacts to achieve my goals (C14)
C15	I have a future career direction that would be meaningful for me (C15)
C16	I have chosen a career path that will give a purpose to my life (C16)
C17	All I want to do now is to pursue the career that is inspiring me (C17)
C18	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful (C18)
C19	Students on my course are very much in demand (C19)

Table 4.3 Reference table for components – Capital

The results from the second attempt identified a 59.9% total cumulative variance which was a slight increase on the first attempt. A KMO score of 0.874 and Sig level of 0.000 was also demonstrated and communalities of 0.50 above for all items. Analysis of the scree plot suggested a break after three components and this corresponded to the distribution of the items within the pattern and correlation matrix tables.

Based on inspection of the two tables and the majority of items loading onto three components, the items distributed across components 4 and 5 being C1, C2, C5, C8 and C9 were omitted and a three-component factor analysis forced. The three-component solution explained a total variance of 57.253% with component 1 contributing 35.63% of the variance, component 2 contributing 11.48% and component 3 contributing 10.14%. Five items loaded onto the first component factor, with four items loaded onto both the second and third factor as detailed in the factor-loading Table 4.4 below.

Component - Loading Factor

<i>Component – Capital</i>	1	2	3
<i>C6</i>	0.813		
<i>C3</i>	0.713		
<i>C4</i>	0.649		
<i>C14</i>	0.628		
<i>C10</i>	0.607		
<i>C11</i>		0.724	
<i>C19</i>		0.722	
<i>C12</i>		0.690	
<i>C13</i>		0.609	0.311
<i>C17</i>			0.784
<i>C16</i>			0.770
<i>C18</i>			0.730
<i>C15</i>			0.596

Table 4.4 Factor Loading - Independent Variable Capital

Capital - Component 1

Interpretation of the items loaded onto component 1 demonstrate that the questions closely related to skills, knowledge and social networks. This component therefore aligns with the conceptualisations of human and social capital as discussed within the review of extant literature. This suggests that the five items above relate to a combination of both knowledge in terms of experience but are closely aligned to social networks and expertise. Component 1 within the factor analysis for capital has therefore been labelled Knowledge and Networks, knowledge capturing the elements relating to skills and expertise. Networks relates to social connections and the link between experience and contacts. The questions relating to this construct are detailed in Table 4.5 below.

Using Cronbach’s alpha post-hoc reliability test, an alpha value of $\alpha = 0.788$ was determined. Hair *et al.* (2010) recognise Cronbach’s alpha as a measure of reliability with a value of 0.60 to 0.70 being at the lower end of an acceptable limit. Based on a benchmark of the alpha value being greater than 0.70, the alpha coefficient of 0.788 is therefore considered acceptable. This has also been considered in conjunction with the factor loading for each item which exceeds 0.50. The scale was therefore considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Capital Component 1	Items	Loading
$a = 0.788$	I have become skilful in my subject specialism (C3)	0.713
	My skills for doing the type of work I want to do are up to date (C4)	0.649
	I can gain support from others for recommendations and ideas (C6)	0.813
	I can use my professional networks and business contacts to develop my career (C10)	0.607
	I am able to build wide and effective networks of contacts to achieve my goals (C14)	0.628

Table 4.5 Rotated Solution Factor Capital – Knowledge and Networks.

Capital - Component 2

Interpretation of the items loaded onto the second component revealed that item C13 loaded onto two components and the removal of this item was subsequently considered. However, based on Hair *et al.* (2013) and the recommendation that each component should have a minimum of four items, it was considered beneficial to retain this item particularly as it loaded higher onto component 2 compared with component 3.

Interpretation of the items loaded onto component 2 are closely aligned to status both in terms of the subject area and educational establishment and relate to both expectations of students in terms of demand and the social capital in terms of possessing a degree. This impacts on the esteem of a student in terms of how they view and value their programme and place of study. Based on this, component 2 has been labelled Esteem and presented in Table 4.6 below.

Using Cronbach's alpha post-hoc reliability test, an alpha value of $a = 0.782$ was determined. Given the acceptable value of this alpha coefficient and each item has a factor loading which exceeds 0.50, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Capital Component 2	Items	Loading
$a = 0.782$	The status of this university is a significant asset to me in job seeking (C12)	0.690
	Students on my course are very much in demand (C19)	0.722
	Prospective employers are eager to employ graduates from my university (C11)	0.724
	My chosen subject(s) rank(s) highly in terms of social status (C13)	0.609

Table 4.6 Rotated Solution Factor Capital: Esteem

Capital - Component 3

Interpretation of the items loaded onto component 3 demonstrate that the questions closely relate to ambition in terms of determining a career path. This aligns with the conceptualisations of graduate capital as defined by Tomlinson (2017) and relates to graduate identity in terms of how a student views their career development.

Component 3 has therefore been labelled Ambition and is identified as a contributing factor to the employability of part-time students. The questions relating to this construct are detailed in Table 4.7 below.

Using Cronbach’s alpha post-hoc reliability test, an alpha value of $a = 0.679$ was determined. Based on the suggestions of Hair *et al.* (2010), whilst this alpha value is less than the preferred benchmark of 0.70, it is still within the boundary of the level of acceptability and greater than 0.60. Given the acceptable value of this alpha coefficient and each item has a factor loading which exceeds 0.50, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Capital Component 3	Items	Loading
$a = 0.679$	I have chosen a career path that will give a purpose to my life (C16)	0.770
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful (C18)	0.730
	I have a future career direction that would be meaningful for me (C15)	0.596
	All I want to do now is to pursue the career that is inspiring me (C17)	0.784

Table 4.7 Rotated Solution Factor Capital – Ambition

The factors relating to capital informed by the literature review and existing conceptualisations have therefore been evaluated further based on the EFA. The

original set of nineteen variables have been reduced to thirteen and a smaller set of closely correlated subscales. Analysis of the communalities between the questions posed during Stage 1 of the primary data collection has determined a set of closely related constructs, which represent three potential dimensions of employability which assess the career readiness for part-time students. The components factors were subsequently interpreted based on the key themes and the constructs labelled with a new name being, Esteem, Ambition and Knowledge and Networks. Capital is therefore a second order construct, comprising three first order constructs Knowledge and Networks, Ambition and Esteem, all of which provide a positive explanation of Capital leading to the hypotheses H_{1a}, H_{1b} and H_{1c} as shown.

H_{1a} Knowledge and Networks has a positive relationship with the second order construct Capital

H_{1b} Ambition has a positive relationship with the second order construct Capital

H_{1c} Esteem has a positive relationship with the second order construct Capital

These three constructs will be examined further in Stage 2 of the study.

4.5.2 Career Management

The second factor extraction considered thirteen items relating to the construct of Career Management and were again evaluated through the use of IBM SPSS Statistics 25 and principal component analysis. Suitability of the data for factor analysis was first assessed via analysis of the correlation matrix which demonstrated a number of coefficients of 0.30 and above. The KMO was 0.883 which exceeds the recommended value of 0.60 and the Bartlett's Test of Sphericity demonstrated statistical significance with a value of 0.000. The data was therefore considered suitable to support the factorability of the correlation matrix. The reference numbers for each component are detailed in Table 4.8.

REFERENCE	COMPONENTS – CAREER MANAGMENT
M1	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful
M2	Preparing for my career is contributing to my personal growth
M3	At this time, it is important for me to work at the job I prefer

M4	I know where to find out information about jobs that interest me (A5)
M5	I know what I want to do when I finish my degree
M6	I know what is required from me to successfully secure the sort of work I want to do
M7	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person
M8	I am studying to fit my future career plan
M9	I can explain the value of my experience to a potential employer
M10	I don't find it difficult to prove my capability to others
M11	I can structure information in a way that meets the needs of my audience
M12	When I make plans for my career, I am confident I can make them work
M13	When I decide to do something about my career, I go right to work on it.

Table 4.8 Reference table for components – Career Management

The PCA identified the presence of three components with eigenvalues exceeding 1, explaining 36.38%, 10.77% and 8.00% of the variance respectively, providing a total cumulative % of 55.23 which is lower than the suggested amount of 60%.

Assessment of the communalities table also identified item M8 as having a factor loading of 0.375 with the next lowest item being 0.403. As discussed previously, Hair *et al.* (2013) recognises that for larger samples, smaller factor loadings can be considered and based on the sample size for this study, a factor loading of 0.30 could be considered significant. However, based on the common variance and analysis of the scree plot, component and pattern matrix tables, item M8 was omitted and the factor analysis process subsequently repeated. The results identified an improved total cumulative variance of 58.021%. A KMO score of 0.884 and Sig level of 0.000 was also demonstrated and with the exception of item of M3 which has a loading of 0.457, all other items have communalities of generally 0.50 or above. Analysis of the scree plot suggested a break after three components and this corresponded to the distribution of the items within the correlation table and pattern matrix (Table 4.7). Based on further analysis of these tables, there was an equal spread of four items across the three components. Whilst a small number of items loaded onto two components, the item with the highest loading was retained within the relevant component, Hair *et al.* (2013) suggests a minimum of three items per component. Based on the equal distribution of items across each construct within this factor analysis, three factors were determined.

Component - Loading

<i>Component – Career Management</i>	Factor 1	Factor 2	Factor 3
<i>M6</i>	0.804		
<i>M5</i>	0.695		
<i>M12</i>	0.666		
<i>M3</i>	0.623		
<i>M7</i>		0.764	
<i>M1</i>		0.737	
<i>M13</i>	0.302	0.494	
<i>M2</i>	0.441	0.463	
<i>M9</i>			0.776
<i>M10</i>			0.664
<i>M11</i>		0.416	0.636
<i>M4</i>	0.450		0.503

Table 4.9 Factor Loading – Independent Variable Career Management

Career Management – Component 1

Interpretation of the items loaded onto component 1 demonstrate that the questions closely relate to determination to succeed. Component one within the factor analysis for career management has therefore been labelled *Determination*, capturing the focus to identify and obtain their preferred place of work. Therefore, in order to manage their career destination, determination to find a suitable position and have the confidence to succeed is identified as a key construct for part-time students. The questions relating to this construct are detailed in Table 4.10 below.

Using Cronbach’s alpha post-hoc reliability test, an alpha value of $\alpha = 0.757$ was determined. Given the acceptable value of this alpha coefficient and each item has a factor loading which exceeds 0.50, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Career Management Component 1	Items	Loading
$\alpha = 0.757$	I know what is required from me to successfully secure the sort of work I want to do (M6)	0.804
	I know what I want to do when I finish my degree (M5)	0.695
	When I make plans for my career, I am confident I can make them work (M12)	0.666
	At this time, it is important for me to work at the job I prefer (M3)	0.623

Table 4.10 Rotated Solution Factor Career Management: Determination

Career Management – Component 2

Examination of the items loaded onto component 2 demonstrates the importance of commitment particularly in terms of developing knowledge and to be successful in their career. Based on this, component 2 has been labelled Commitment. The questions relating to this construct are presented in Table 4.11.

Using Cronbach’s alpha post-hoc reliability test, an alpha value of $a = 0.687$ was determined. Given the acceptable value of this alpha coefficient and each item has a factor loading which exceeds 0.40, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Career Management Component 2	Items	Loading
$a = 0.687$	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person (M7)	0.764
	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful (M1)	0.737
	When I decide to do something about my career, I go right to work on it. ((M13)	0.494
	Preparing for my career is contributing to my personal growth (M2)	0.463

Table 4.11 Rotated Solution Factor Career Management: Commitment

Career Management – Component 3

Evaluation of the items loaded onto component 3 identified confidence in terms of being able to demonstrate capability and experience as being a contributory factor to career management. Based on this, component 3 has been labelled Confidence.

Questions relating to this are detailed in Table 4.12 below.

Using Cronbach’s alpha post-hoc reliability test, an alpha value of $a = 0.722$ was determined. Given the acceptable value of this alpha coefficient and each item has a factor loading which exceeds 0.50, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Career Management Component 3	Items	Loading
$a = .722$	I can explain the value of my experience to a potential employer (M9)	0.779
	I don't find it difficult to prove my capability to others (M10)	0.664
	I can structure information in a way that meets the needs of my audience (M11)	0.636
	I know where to find out information about jobs that interest me (M4)	0.503

Table 4.12 Rotated Solution Factor Career Management: Confidence

The factors relating to career management have therefore been redefined based on the EFA and communalities between the questions posed during stage 1 of the primary data collection. The original set of thirteen variables have been only slightly reduced to twelve but with an equal distribution across three key constructs. This does however differ to prior conceptualisations of career management where the focus has been on two dimensions namely self-management and signal management. Based on interpretation of the correlated items, each component has been labelled with a new name being, Confidence, Determination and Commitment. These three constructs will be examined further in Stage 2 of the study. Career Management is therefore a second order construct, comprising three first order constructs, Confidence, Determination and Commitment, all of which provide a positive explanation of Career Management leading to hypotheses H_{2a}, H_{2b} and H_{2c} as shown.

H_{2a} Confidence has a positive relationship with the second order construct Career Management

H_{2b} Determination has a positive relationship with the second order construct Career Management

H_{2c} Commitment has a positive relationship with the second order construct Career Management

Both Capital and Career Management form independent variables which are reliant on Employability generally as a dependent variable. Factors relating to employability therefore form the third factor analysis within Stage 1 of the primary data collection and analysis.

4.5.3 Employability

The final extraction of the initial data collection considered eight items relating to the dependant variable of employability. Again, through the use of IBM SPSS Statistics 25 and principal component analysis the factors were evaluated. As per the previous two extraction processes, the suitability of the data for factor analysis was first assessed via analysis of the correlation matrix which demonstrated a number of coefficients of 0.30 and above. The KMO was 0.840 which exceeds the recommended value of 0.60 and the Bartlett's Test of Sphericity demonstrated statistical significance with a value of 0.000. The data was therefore considered suitable to support the factorability of the correlation matrix. The corresponding reference number for each component is presented in Table 4.13.

Reference	Component - Employability
E1	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers (E1)
E2	I know what kinds of work would suit my personality (E2)
E3	An employer would be impressed with my qualifications (E3)
E4	In formulating my career goals, I take account of external market demand (E4)
E5	Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals (E5)
E6	I follow developments in the field of industry and employment regularly (E6)
E7	I find it easy to quickly gain respect from others (E7)
E8	I am confident that I would find another job if I started searching (E8)

Table 4.13 Reference table for components - Employability

The PCA identified the presence of two components with eigenvalues exceeding 1, explaining 41.46%, 8.70% and 13.59% of the variance respectively providing a total cumulative % of 55.055. The total variance at this first attempt of factor extraction is therefore slightly lower than the suggested amount of 60%. Assessment of the communalities table identified item E8 as having a factor loading of 0.418 which was lower than other items. Based on the common variance and analysis of the scree plot and component and pattern matrix tables, item E8 was omitted and the factor analysis process subsequently repeated.

The results identified an improved overall total cumulative variance of 58.22%. A KMO score of 0.814 and Sig level of 0.000 was also demonstrated and communalities of 0.50 above for all items with the exception of item E2 which had a slighter low communality of 0.473. However, based on the analysis of the scree plot and the distribution of the items within the pattern and correlation matrix tables, item E2 was retained. The two-component solution explained component 1 as contributing 42.745% of the total variance and component 2 contributing 15.48%. Four items loaded onto the first component factor, with three items loading onto both the second factor as detailed in the Pattern Matrix, Table 4.14 below.

Component - Loading		
<i>Component – Employability</i>	Factor 1	Factor 2
<i>E3</i>	0.803	
<i>E1</i>	0.779	
<i>E7</i>	0.774	
<i>E2</i>	0.667	
<i>E5</i>		0.844
<i>E4</i>		0.711
<i>E6</i>		0.572

Table 4.14 Pattern Matrix Table - Independent Variable Career Management

Employability – Component 1

Interpretation of the items loaded onto component 1 relate to supply and in particular an individual’s self-perception in terms of their employability and what they can offer. Component 1 within the factor analysis for the dependent variable has therefore been labelled Self-belief. The questions relating to this construct are detailed in Table 4.15 below.

Using Cronbach’s alpha post-hoc reliability test, an alpha value of $\alpha = 0.771$ was determined. Given the acceptable value of this alpha coefficient and each item has a factor loading which exceeds 0.50, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study.

Factor – Employability	Item2	Loading
$a = 0.771$	An employer would be impressed with my qualifications (E3)	0.803
	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers (E1)	0.779
	I find it easy to quickly gain respect from others (E7)	0.774
	I know what kinds of work would suit my personality (E2)	0.667

Table 4.15 Rotated Solution Employability: Self-belief

Employability – Component 2

The items loaded onto component 2 relate to demand both in terms of the labour market and being aware of the employment opportunities. The second dependent component has therefore been labelled Market Awareness. Table 4.16 summarises the questions for this construct. Using Cronbach’s alpha post-hoc reliability test, an alpha value of $a = 0.592$ was determined. The value of this alpha coefficient is lower than the recommended value of 0.700. However, as each item has a factor loading which exceeds 0.50, the scale was considered acceptable as a construct for further analysis within Stage 2 of the study. Caution is however exercised within further analysis of this dimension.

Factor – Employability 2	Item 2	Loading
$a = 0.592$	Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals (E5)	0.844
	In formulating my career goals, I take account of external market demand (E4)	0.711
	I follow developments in the field of industry and employment regularly (E6)	0.572

Table 4.16 Rotated Solution Factor Employability: Market Awareness

Based on interpretation of the correlated items, and the labelling of the two components as Self-belief and Market Awareness, two hypotheses have emerged from the initial analysis:

H_{3a} Self-belief has a positive relationship with the construct Employability

H_{3b} Market awareness has a positive relationship with the construct Employability

Two hypotheses from the independent variables and their relationship with Employability have also emerged:

H_{1d} Capital –has a positive relationship with Employability.

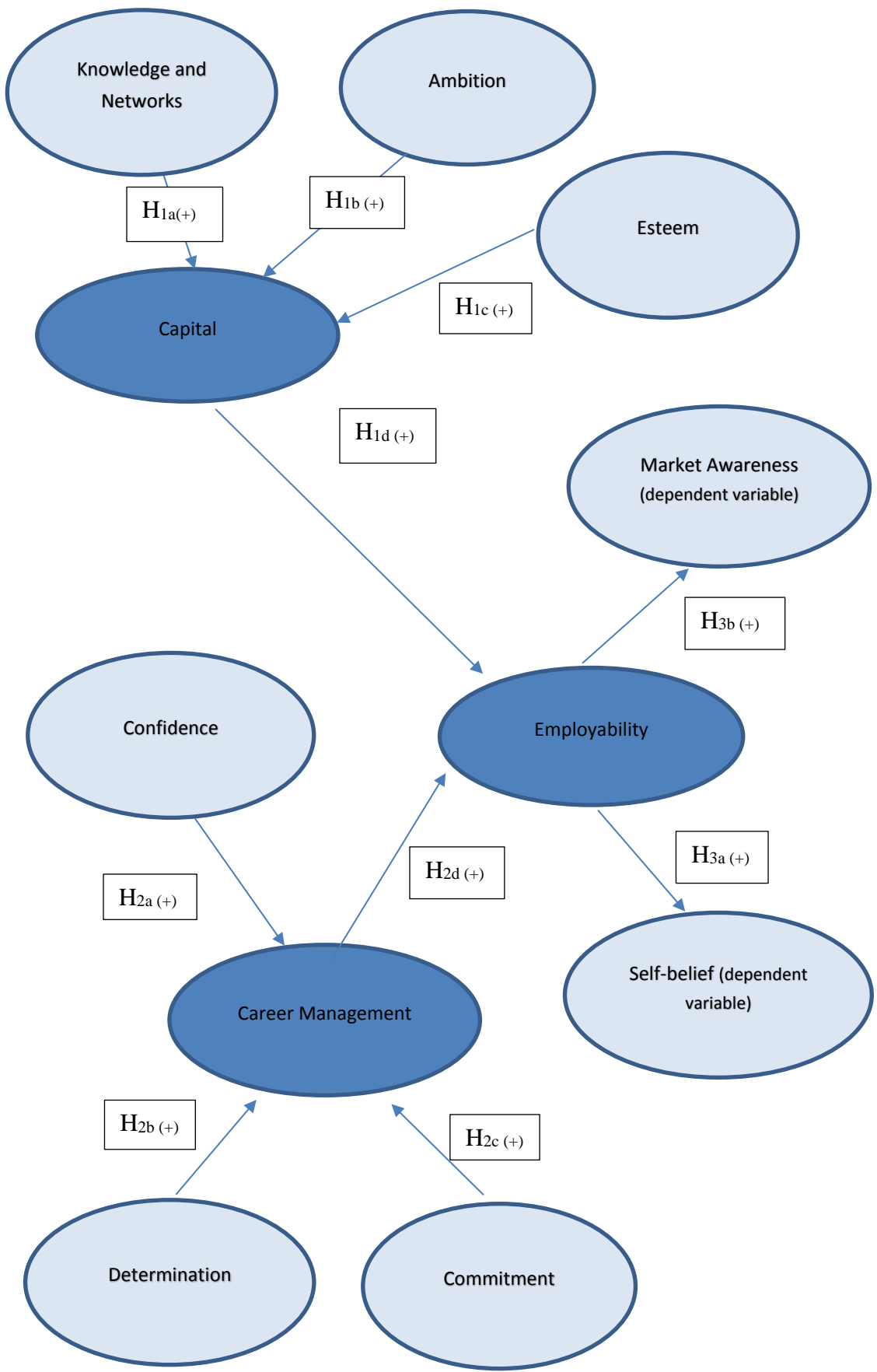
H_{2d} Career Management has a positive relationship with Employability.

4.6 Proposed Hypothesised Model

The literature review identified and evaluated a number of dimensions, which contribute to the antecedents of employability. However, as previously identified, much of the focus of employability relates to full-time students and there is a gap in the theory in terms of the relevance of existing frameworks and understandings in terms of part-time students both at undergraduate and postgraduate level. The aim of using EFA within Stage 1 of this study was to reduce the number of variables within existing structures and conceptualisations and determine a smaller set of variables. From this, a number of potential relationships and tentative hypotheses are proposed.

The proposed model, which combines the hypotheses identified in this chapter into a single research model, has emerged from this exploratory study. The key themes embedded in the earlier part of this chapter identify capital and career management as antecedents to employability but the next stage of this study will analyse the significance of the relationships. Capital is defined as a second-order construct comprising the dimensions of learner ambition, knowledge and networks and esteem as first order factors. Career management is also a second-order construct that is determined by learner confidence, commitment and determination. Finally, employability is defined separately by market awareness and internally, through learner self-belief. This model is specific to the part-time learner and it is the intention through further empirical study to test the strength and significance of the posited relationships. A conceptual model of employability for part-time students is therefore offered as an output of Stage 1 and is diagrammatically presented in Figure 4.2 below.

Figure 4.2 – Conceptual Model



4.7 Chapter Summary

The survey data from the initial questionnaire analysed by means of EFA provides a revised, validated and reliable study instrument to assess the various components of the conceptual model represented in Figure 4.2. The conceptual model and following set of hypotheses will be tested within the second stage of this study by means of assessing the paths and relationships presented.

H_{1a} Knowledge and Networks has a positive relationship with the second order construct Capital

H_{1b} Ambition has a positive relationship with the second order construct Capital

H_{1c} Esteem has a positive relationship with the second order construct Capital

H_{1d} Capital –has a positive relationship with Employability.

H_{2a} Confidence has a positive relationship with the second order construct Career Management

H_{2b} Determination has a positive relationship with the second order construct Career Management

H_{2c} Commitment has a positive relationship with the second order construct Career Management

H_{2d} Career management has a positive relationship with Employability.

H_{3a} Self-belief has a positive relationship with the construct Employability

H_{3b} Market awareness has a positive relationship with the construct Employability

To validate the factor results and assess the replicability of the identified factors, Hair *et al.* (2010) suggests the use of confirmatory factor analysis (CFA). The second stage of this analysis will be based on a separate data sample. In addition to CFA, the use of structural equation modelling (SEM) further assesses the theorised constructs. Chapter 5 details the findings and analysis from Stage 2 of the study.

CHAPTER FIVE

Stage 2 Data Findings and Analysis

5.0 Overview of the Chapter

A two-staged approach formed the basis of the primary research for this thesis. The first stage as detailed in Chapter 4 comprised exploratory factor analysis (EFA) and through the use of SPSS version 25 the determination of a set of valid and reliable factors and a validated measurement tool. The development of the theory based conceptual model illustrated in Figure 4.2 is the output of this stage of the research. To test the conceptual model further, a revised survey questionnaire was distributed to form the second stage of the primary data collection. This chapter will discuss the statistical analysis and findings for Stage 2. This will include an initial analysis of the data and identification of potential outliers and anomalies. This is preceded by the descriptive analysis and overview of the data set. The findings of the confirmatory factor analysis (CFA) will be presented to confirm the reliability and validity of the latent factors presented. The validated data from the CFA informs the subsequent analysis of the structural model utilising structural equation modelling (SEM) through the adoption of AMOS (version 25).

Structural equation modelling is therefore used to empirically evaluate the conceptual model for part-time students as posited in Chapter 4 of this study. The analysis will be undertaken through testing the proposed hypothesised relationships as detailed in Section 4.7. Such relationships were determined from constructs from well-established literature and explored and tested further through EFA. The scales used in Stage 2 of this study have therefore been validated from both established literature and exploratory testing to “*determine how, and to what extent, the observed variables are linked to their underlying factors*” (Byrne, 2016). The informed latent structures identified will be examined further during Stage 2. A total of 32 items are distributed across 8 first order factors: ambition; knowledge and networks; esteem; confidence; determination; commitment; market awareness and self-belief.

This chapter therefore discusses the methods and principles associated with undertaking the CFA and SEM in order to test the hypothesised relationships and concludes with the presentation of a model of employability for part-time students in

HE. The findings from Stage 2 are therefore presented and analysed throughout this chapter.

5.1 Initial data analysis

Hair *et al.* (2018) acknowledges the importance of examining the data prior to undertaking any further analysis and screening it to identify potential issues, which could affect the SEM analysis. The data for Stage 2 of the study was obtained from three Universities who offer part-time programmes of study. A link to an electronically administered survey was issued via email to students studying a part-time course at the three institutions. Due to the distribution method, there is scope for potential outliers to have completed the questionnaire. As previously identified by Callender and Little (2015) not all part-time students are employed and some learners may not actually be undertaking a degree to enhance their employability but are instead engaging with HE for the purposes of enjoyment. It was therefore critical to examine the data to screen any potential issues concerning the participants.

5.1.1 Sample size

According to Hair *et al.* (2018), the recommended sample size for SEM can be considered on the same basis as the recommendations for EFA. Based on this Hair *et al.* (2018), suggest as a rule of thumb, an absolute minimum sample of 50 but in real time a preferred minimum of 100 observations. However, it is further recommended by Hair *et al.* (2018, p. 134), that there should be at “*least 5 observations per variable*”. Based on 32 variables determined via EFA at Stage 1, 160 observations would provide a reasonable sample for the study. However, Hair *et al.* (2018), further indicates a minimum of 500 where there is a larger number of constructs, lower commonalities and/or “*fewer than three measured items*”. For a model with less than 7 constructs, a sample of 300 respondents is acceptable. As the proposed conceptual model has 8 constructs, a minimum sample of 500 is preferred. One of the constructs, market awareness has only three items, a higher sample was therefore targeted.

Three institutions were asked to take part in the study, the researcher’s own institution, Northumbria University and Teesside due to it being another large provider of part-time programmes. Birkbeck University who predominately offer

part-time modes of study took part in the initial scoping exercise and the development of the initial questionnaire. A small number of participants from Birkbeck took part in Stage 1 during the EFA but for consistency in terms of sample and generalisability, the participating institutions were invited to complete the second questionnaire distributed during Stage 2. Consideration was also given to extending the study to other institutions who also offer part-time programmes of study, including the Open University (OU). However, despite several attempts and support from the careers team at the OU, they confirmed they were unable to assist in the distribution of the questionnaire. The rationale for this was the limitations imposed by the OU on the number of surveys students are requested to complete and the potential conflict with future surveys and funding they wished to focus on, collecting data for their own benefit. The University of Suffolk, University of Bristol and Birmingham City University were also contacted by email but were unable to assist. John Moore's University confirmed they would be willing to take part but due to the relatively small number of part-time students, they were not included in the sample. The survey was therefore distributed to Birkbeck, Teesside and Northumbria on the basis that they had contributed to Stage 1 of the data collection and analysis and because both Birkbeck and Teesside were interested in the study and wished to be involved with the intention of undertaking further research based on the findings.

The response rate from Birkbeck from the second survey was disappointing and consideration was given to omitting these responses from the sample. However, when examining the responses from these participants, it was evident that they did not skew the overall results, generalisability could therefore be assumed. Furthermore, the sample from Birkbeck could actually be higher as 5.3% respondents selected "*other – rather not say*". All respondents were therefore retained for the initial examination of the data.

The survey questionnaire distributed during the second phase of this study therefore comprised of 32 items to measure part-time students' responses to antecedents of employability taken from well-established literature associated with employability. The second part of the questionnaire determined the demographic profile details about the target respondents. As per the initial questionnaire adopted during Stage 1

of the study, a seven-point Likert Scale was utilised whereby the respondents rated each statement.

5.1.2 Respondent Overview

Scrutiny of the response for question 39 identified potential outliers in the data set in terms of some respondents being retired or unable to work as detailed in Table 5.1

Code	Description	Responses (%)	Comment
1	Working full-time (35 hours or more per week)	72.5%	Retain – supports literature that a significant number of respondents are working full-time whilst engaging with part-time study
2	Working part-time (between 8 hours to 34 hours a week)	18.4%	Retain – again support theory that part-time students may be studying part-time whilst also working part-time
3	Working less than 8 hours per week	0.6%	Retain - Small number of participants but considered relevant and supports theory that full-time education is not accessible for all students and part-time study may be the only viable option. Supported from scoping exercise and feedback from participants at Birkbeck
s	Temporarily unemployed (but actively seeking work)	3%	Retain - Small percentage but relates to theory that part-time students engage with HE to develop their employability
5	Temporarily unemployed (but not currently seeking work)	1.6%	Exclude – potential outlier as the respondents have indicated they are not seeking work
6	Retired	1.2%	Exclude – potential outlier as the respondents have indicated they are not seeking work
7	Permanently unemployed (eg. Chronically sick, unable to work or independent means)	0.4%	Exclude – potential outlier as the respondents have indicated they are not seeking work
8	A full-time carer (of home, family etc.)	2.4%	Exclude – potential outlier as the respondents have not indicated that they are seeking work

Table 5.1 Question 39 – What describes your current situation best?

Respondents coded 5, 6, 7 and 8 do not meet the criteria to contribute to the study and are considered potential outliers to the study. Responses from these respondents will therefore be omitted from the analysis. The revised demographic profile of the respondents is detailed in Table 5.2.

Demographics	Number	% (total)
Gender		
Male	218	45.6%
Female	259	54.2%
Rather not to say	1	0.2%
Age Group		
18-24	74	15.5%
25-34	159	33.3%
35-44	144	30.1%
45-54	81	16.9%
55-64	20	4.2%
65 and over	0	0%
Rather not to say	0	0%
Average annual pre-tax personal income		
Less than £9,999	35	7.3%
£10,000 to £19,999	98	20.5%
£20,000 to £29,999	106	22.2%
£30,000 to £39,999	72	15.1%
£40,000 to £49,999	71	14.9%
£50,000 to £59,999	28	5.9%
£60,000 or more	33	6.9%
Prefer not to answer	35	7.3%
Institution		
Northumbria University	343	71.8%
Teesside University	96	20.1%
Birkbeck University	13	2.7%
Rather not say	26	5.4%
Programme of Study		
Undergraduate	158	33.1%
Postgraduate	224	46.9%
Certificate/Diploma of HE	15	3.1%
Postgraduate Certificate	23	4.8%
Postgraduate Diploma	13	2.7%
Degree Apprenticeship	45	9.4%
Employment Status		
Working full-time (35hrs or more per week)	367	76.8%
Working part-time (between 8 & 34 hrs per week)	93	19.5%
Working less than 8hrs per week	3	0.6%
Temporarily unemployed - actively seeking work	15	3.0%
Total number of responses (per section)	478	100%

Table 5.2 Profile of Respondents

The profile of respondents demonstrates a slighter higher contribution from females at 54.2% which differs to the survey completed at Stage 1 of study although not significantly. The majority of the respondents were aged between 18 and 44 accounting for 78.9% of the total number of responses. A high percentage of 76.8 respondents are working full-time and are therefore undertaking a part-time programme of study alongside their work commitments. This relates to the work of Butcher and Rose Adams (2015) who identify that not all students will have the option to study full-time due to other commitments and circumstances which could

relate to the need to work full-time. A part-time mode of study is therefore the only option for some students.

The demographics demonstrate that 80.3% are between the age ranges of 24-54 demonstrating a significant number of part-time learners are mature students. This relates to the earlier work of Maguire (2013) who recognised individuals may have made the wrong choice at earlier stages and hence may engage with HE as a mature student. Swain and Hammond (2011) recognised the motivations to study are linked to improving opportunities which relate to a career change, entry to the labour market or a requirement of current employment.

The majority of the respondents who took part in the second survey are from Northumbria University contributing 71.8% of the total number of respondents. This can be expected as it was possible to promote the survey at Northumbria through reaching out to Programme Leaders to encourage participation and prompting follow up emails. This proved more problematic with Teesside and Birkbeck where the distribution of the survey could not be followed up to the same extent. Nevertheless, the responses from these institutions contributed to the development and the responses were checked for normality and for outliers as detailed in the following section. The demographics of the age groups, income and current employment status provides a profile of a representative sample for the purposes of this study.

5.1.3 Normality

Outliers in data findings have the potential to skew structural modelling. It is therefore important to examine the data to ensure multivariate Normality and identify potential outliers. Maximum Likelihood Estimation (MLE) is one method to assume multivariate normal data (Tabachnick and Fidell, 2007). The authors further clarify that multivariate Normality can be examined using Mahalanobis D^2 which enables variables in the data set that have unusual patterns of values to be identified. An evaluation of the data set did not identify any outliers.

5.2 Data Findings and Analysis

Awang (2014) acknowledges CFA as the procedure to validate the measurement model and constructs for use in SEM. Unidimensionality, validity and reliability of each latent construct can be assessed through the use of CEM (Awang, 2014) with Unidimensionality forming the first stage. Figure 5.1 below summarises the processes and stages in terms of interpretation of the data collection and analysis for Stage 2, in order to test the theory based and conceptual model as presented in Chapter 4. Unidimensional analysis of the data set precedes the CFA and reliability and validity analysis (Awang, 2014). The structural model is subsequently tested and presented.

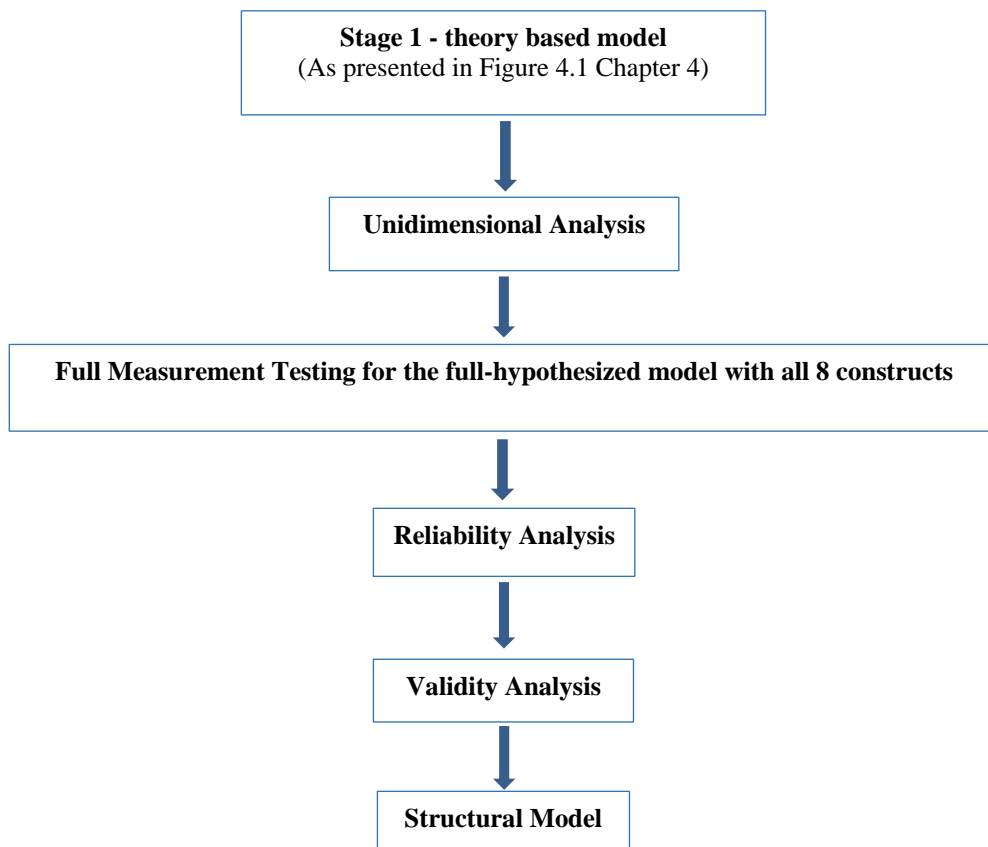


Figure 5.1 Stages and Processes – Stage 2

5.3 CFA Step 1 – Conceptual Measurement Model Development

Confirmatory factor analysis (CFA) provides a statistical tool to assess the validity of the constructs previously determined from the EFA during Stage 1 of the research study. Through assessing the validity of the constructs, the acceptance of the conceptual research model and posited hypothesis can be examined further through SEM. As identified by Byrne (2016, p. 7) CFA “*focuses solely on the link between factors and their measured variables, within the framework of SEM, it represents what has been termed a measurement model*”. CFA is therefore the requisite for SEM analysis.

Hair *et al.* (2018), suggests a six-stage process for SEM. The first four stages focus on CFA in terms of examining measurement theory.

Stage 1

The first stage of the process relates to the development and data analysis of the constructs, which will form the measurement model. The constructs determined from Stage 1 of the study are therefore utilised within the CFA, comprising of thirty-two items across three second order constructs of Capital, Career Management and Employability. Three first order constructs are associated with both Capital and Career Management with two first order constructs linked to Employability.

The first stage of data analysis comprises the evaluation of descriptive statistics in order to obtain an understanding of the data. The second stage of analysis comprises hypothesis testing through CFA and SEM. The univariate analysis of each item is presented in tables 5.3 to 5.5 where the tables detail the mean, standard deviation and percentage distribution for each item.

Through analysing the frequency distribution of the individual variables, potential outliers and missing data can be identified. The survey questionnaire was designed to prevent questions being left blank and there is therefore no missing data. In terms of outliers, this can also be assessed in conjunction with the CFA and Normality of data.

An initial evaluation has not identified any significant outliers which could potentially distort the findings at this stage. Assessment of the frequency distribution particularly in terms of histograms enables the analysis of the distribution curve and

as demonstrated by Hair *et al.* (2011) this plays an important role in determining if the data is normally distributed. Measures of central tendency and dispersion are further descriptive analysis techniques to determine the spread of variability in the data. Again, this enables any potential issues to be considered before undertaking the second stage of data analysis. The measure of dispersion “*describes the tendency for sample responses to depart from the central tendency*” (Hair *et al.*, 2011, p. 313) and through calculating the dispersion from the mean, the variability in the data can be identified. Hair *et al.* (2011, p. 314) further explains that the standard deviation is probably one of “*the most valuable index of dispersion*” and is used to the “*describe the spread or variability of the sample distribution values from the mean*” and effectively tells us “*something about the level of agreement among the respondents when they answered a particular question*”. The mean and standard deviation has therefore been evaluated for each construct.

In terms of capital and the first order construct of ambition, the scores for the standard deviation are between 0 and 2 which represents that the data is normally distributed (Table 5.3a). Iteration of the findings may result in items and/or scales being removed and this is a consequence of CFA before a valid and reliable model can be determined. For completeness, this will be presented in this chapter.

The mean for item CA3 differs slightly to the other three items and this can be largely attributed to the range of responses differing slightly. Whilst this is not significant at this initial stage of analysis, factor CA3 will be analysed further during the CFA stage of analysis.

Capital Scale Set

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
I have chosen a career path that will give a purpose to my life (CA1)	5.81	1.274	1.0	2.3	2.3	9.2	11.9	40.2	33.1
I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful (CA2)	5.77	1.215	0.8	2.7	2.1	7.3	13.8	46.9	26.4
I have a future career direction that would be meaningful for me (CA3)	5.89	1.104	0.6	2.5	0.6	4.6	15.1	48.5	28.0
All I want to do now is to pursue the career that is inspiring me (CA4)	5.70	1.180	0.6	1.5	3.3	8.4	19.9	40.8	25.5

Table 5.3a Capital - Ambition

Evaluation of the standard deviation for the construct, knowledge and networks (Table 5.3b) suggests that the data responses are evenly distributed and the level of responses from the respondents are generally consistent. The responses generally indicate a positive agreement with all the statements and are all retained for further analysis within the measurement model.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
I have become skilful in my subject specialism (CKN1)	5.54	1.126	0.8	1.7	3.3	7.9	23.2	48.5	14.4
My skills for doing the type of work I want to do are up to date (CKN2)	5.45	1.279	0.4	3.3	8.2	5.6	19.0	48.5	14.9
I can gain support from others for recommendations and ideas (CKN3)	5.67	1.090	0.8	1.7	2.7	5.0	20.9	52.3	16.5
I can use my professional networks and business contacts to develop my career (CKN4)	5.38	1.448	2.5	4.4	4.4	9.4	19.0	41.4	18.8
I am able to build wide and effective networks of contacts to achieve my goals (CKN5)	4.97	1.401	1.7	5.9	8.6	12.1	30.1	32.2	9.4

Table 5.3b Capital – Knowledge and Networks

Analysis of the mean scores for capital and distribution of the responses suggests that overall the respondents neither agreed nor disagreed with the statements (table 5.3c). Therefore, whilst the standard deviation values do not vary significantly from the means, the items are considered as problematic, suggesting that the respondents do not relate to the construct of esteem. The items relating to this construct link to literature relating to social capital and whilst the EFA data findings suggested this as an antecedent to employability for part-time students, the findings in table 5.3c below suggest otherwise. This construct is therefore excluded from the measurement model on the basis that it would not significantly contribute to the development of a model for part-time students due to the lack of respondents being able to respond to indicate their agreement or disagreement. This could be due to the questions relating largely to status and university and perhaps whilst relevant for full-time students, this is not an area which part-time students have considered or find relevant. It is possible due to demographics and limitations on choice of institution when studying part-time that the respondents are unable to identify with the concept of status and rank. For these reasons, this construct is not explored further within this study.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
The status of this university is a significant asset to me in job seeking	4.63	1.488	4.2	5.6	6.1	33.5	16.7	25.4	8.4
Students on my course are very much in demand	4.55	1.295	2.1	4.4	5.0	46.9	15.3	19.2	7.1
Prospective employers are eager to employ graduates from my university	4.53	1.148	1.7	2.5	3.1	55.2	13.2	20.1	4.2
My chosen subject(s) rank(s) highly in terms of social status	4.66	1.440	3.1	6.5	6.5	29.7	19.7	28.0	6.5

Table 5.3c Capital – Esteem

Career Management Scale Set

Bridgstock (2009) conceptual model focuses on the term Career Management. The findings from the initial data collection for the EFA identified three potential components, which were subsequently labelled, Confidence, Determination and Commitment.

The responses for the first construct confidence are displayed in Table 5.4a. The values for the standard deviation for each item demonstrate that whilst the responses do not vary significantly from the mean, the value for item CMC3 is higher than the other values and the responses to this question are generally not equally dispersed. This could potentially affect the measurement model and as such CMC3 may be omitted during further analysis.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
I know where to find out information about jobs that interest me (CMC1)	5.53	1.293	0.8	3.3	5.0	7.3	20.1	43.3	20.1
I can explain the value of my experience to a potential employer (CMC2)	5.91	1.045	0.8	1.3	1.5	2.9	16.7	49.6	27.2
I don't find it difficult to prove my capability to others (CMC3)	4.97	1.486	2.5	4.6	13.4	8.4	25.1	35.8	10.3
I can structure information in a way that meets the needs of my audience (CMC4)	5.73	0.958	0.6	0.4	2.3	4.2	23.0	53.3	16.1

Table 5.4a Career Management – Confidence

The results for the standard deviation for the construct determination identifies that that items are generally equally dispersed and do not vary significantly from the overall mean scores (Table 5.4b). The mean is slightly higher for CMD3 than the other items and further analysis of the responses for this item indicate that more respondents agree with this statement than the other three items which are more equally dispersed. The item is therefore retained for further analysis within the initial measurement model.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
I know what I want to do when I finish my degree (CMD1)	5.69	1.416	2.1	2.9	4.2	7.5	12.3	40.2	30.8
I know what is required from me to successfully secure the sort of work I want to do (CMD2)	5.49	1.248	1.0	1.9	6.3	7.7	21.3	44.8	16.9
At this time, it is important for me to work at the job I prefer (CMD3)	5.90	1.133	0.2	1.9	3.3	5.4	11.5	47.1	30.5
When I make plans for my career, I am confident I can make them work (CMD4)	5.29	1.254	0.6	4.2	6.3	6.9	29.9	41.0	11.0

Table 5.4b Career Management – Determination

The responses for the construct commitment demonstrate that the standard deviation does not vary significantly from the overall mean for each item with item CMM2 having the highest amount of variance overall. The items within this construct were considered acceptable in terms of overall dispersion and included within the proposed measurement model for further analysis and hypothesis testing.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person (CMM1)	6.25	0.847	0.2	0.2	0.6	2.1	11.1	41.4	44.4
When I decide to do something about my career, I go right to work on it. (CMM2)	5.54	1.184	0.4	1.9	3.8	10.3	24.7	38.5	20.5
I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful (CMM3)	6.05	0.951	0.2	0.4	1.0	4.6	15.3	42.9	35.6

Preparing for my career is contributing to my personal growth (CMM4)	5.87	0.996	0.2	1.5	1.0	5.6	15.7	51.7	24.3
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Table 5.4c Career Management – Commitment

Employability - Scale Set

The construct of Employability forms the dependent variable within the proposed measurement model. Based on the first phase of the data collection and exploratory factor analysis, two factors were determined. The second stage of data collection and review of the standard deviation for the construct self-belief (Table 5.5a) demonstrates that the values do not vary significantly from the mean although the mean for item ESB4 is higher than the other items. This appears to be due to a higher number of respondents either agreeing or strongly agreeing with the statement. All of the items were initially included within the measurement model although based on further iteration of the measurement model, due to a lower factor loading than the other items, item ESB4 was subsequently omitted from the final iteration of the measurement model for SEM.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
An employer would be impressed with my qualifications (ESB1)	5.45	1.213	1.0	1.7	2.9	14.6	22.2	40.4	17.2
I find it easy to quickly gain respect from others (ESB2)	5.16	1.184	0.6	2.5	5.6	17.4	27.2	38.9	7.7
Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers (ESB3)	5.33	1.134	0.6	1.9	2.3	16.3	29.3	37.2	12.3
I know what kinds of work would suit my personality (ESB4)	5.74	1.110	0.6	1.5	2.9	5.2	20.5	46.4	22.8

Table 5.5a Employability – Self-belief

Based on the EFA and a low Cronbach’s alpha post-hoc reliability test, caution was exercised in retaining market awareness as a construct within Stage 2 and the proposed conceptual model. The mean for the individual items is generally lower than the other constructs within the proposed model with the standard deviation being

slightly higher. The construct was retained as part of the initial CFA measurement model but later omitted due to the low factor loadings.

Variables	Mean	St dev	1 %	2 %	3 %	4 %	5 %	6 %	7 %
Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals (EMA1)	4.94	1.312	1.3	5.0	5.2	23.0	25.1	32.8	7.5
In formulating my career goals, I take account of external market demand (EMA2)	5.03	1.471	1.7	6.9	6.9	15.9	20.9	35.8	11.9
I follow developments in the field of industry and employment regularly (EMA3)	5.09	1.439	1.5	7.3	5.6	11.9	25.9	35.8	11.9

Table 5.5b Employability – Market Awareness

5.3.1 Research Constructs and Hypotheses

The above tables provide a basic level of analysis of the findings from Stage 2 of the data collection and a number of potential issues identified through evaluating the mean and standard deviation for each construct. Based on a review of the tables, the construct Esteem has been omitted from the measurement model due to the respondents being unable to either agree or disagree with the items.

Statistical analysis techniques and the adoption of CFA enables the relationship between the constructs to be examined and evaluated further.

The following hypotheses initially deducted from Stage 1 of this study and amended based on the multivariate analysis are summarised below. These hypotheses form the next stage of the study.

H_{1a} Knowledge and Networks has a positive relationship with the second order construct Capital

H_{1b} Ambition has a positive relationship with the second order construct Capital

H_{1c} Capital has a positive relationship with Employability.

H_{2a} Confidence has a positive relationship with the second order construct Career Management

H_{2b} Determination has a positive relationship with the second order construct Career Management

H_{2c} Commitment has a positive relationship with the second order construct Career Management

H_{2d} Career management has a positive relationship with Employability.

5.4 CFA Step 2 – Measurement Model Development

The next stage in the process of CFA comprises analysis of the measurement model and testing the reliability and validity of the proposed measurement as presented in Figure 5.2. The refined measurement model has been determined from the initial multivariate analysis which included the removal of the construct Esteem. The measurement model forms a second order structure for factor analysis which is analysed to verify its unidimensionality.

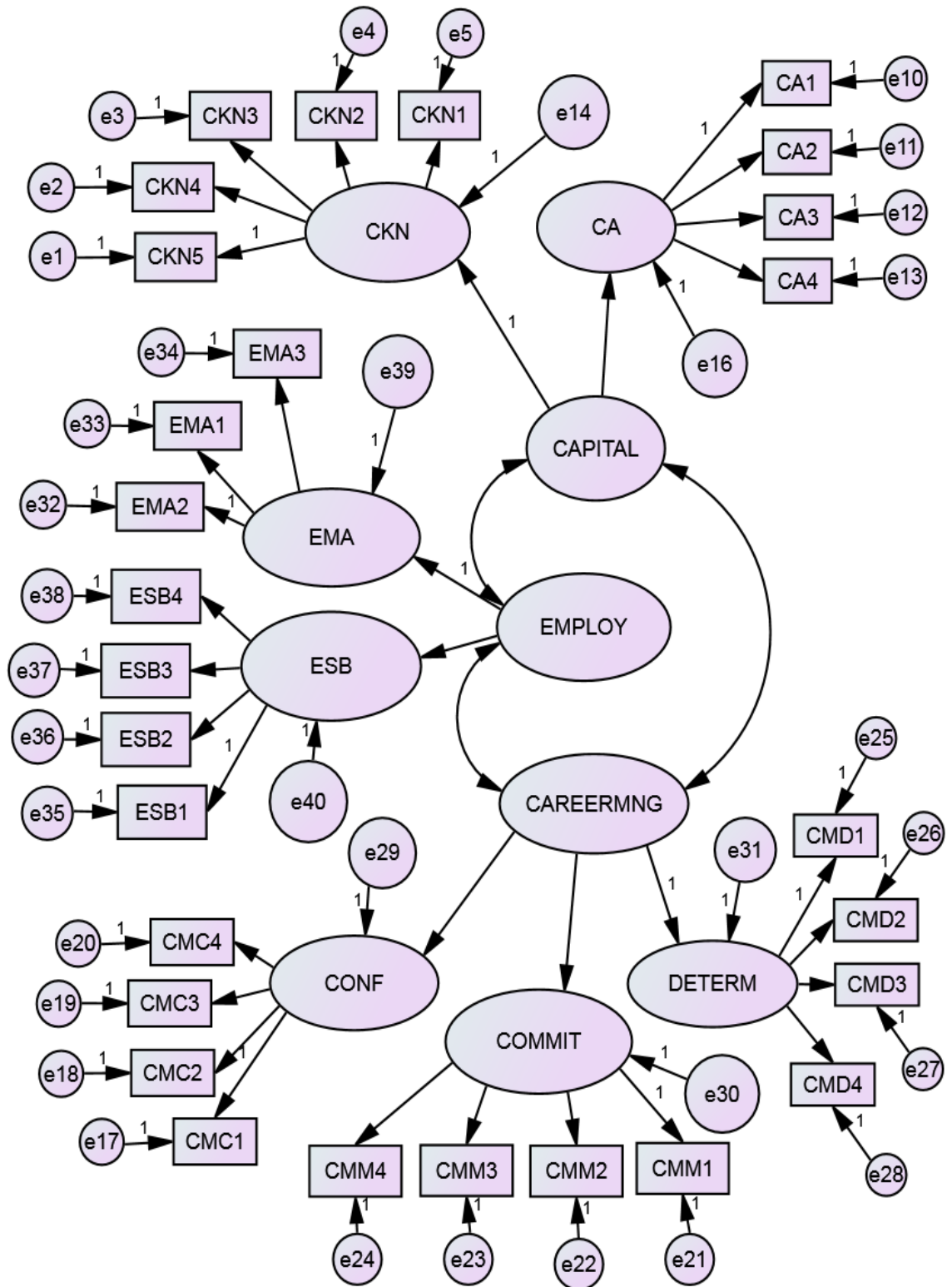


Figure 5.2 Initial Measurement Model

5.4.1 Unidimensional Testing of Constructs

Four fit indices have been adopted CMIN/DF (minimum discrepancy), Confirmatory Fit Index (CFI), Goodness of Fit Index (GFI) and Root Mean Square Error of Approximation (RMSEA) for analysis of the model. The level of acceptance for each of the indices are presented in Table 5.6 below. The initial analysis and first attempt and determining model fit are also detailed in the table and demonstrate that the model as currently presented does not meet the levels of acceptance and as such further refinement of the model is required.

MODEL FIT CATEGORIES	LEVEL OF ACCEPTANCE
Parsimonious Fit CMIN/DF	< 3.0 Between 2.0 & 5.0 acceptable
Incremental Fit CFI	>0.9
Absolute Fit GFI	>0.9
Absolute Fit RMSEA	<0.08

Table 5.6 Model Fit and Level of Acceptance

Initial assessment of the pooled constructs and measurement model (Figure 5.2) demonstrates a poor model fit. The test yields a X^2 statistic of 1298.726 with a X^2/df statistic of 3.820 which is within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). However, the goodness-of-fit (GFI) = 0.829 and CFI = 0.817, is below the recommended level of 0.9. The badness-of-fit index RMSEA is however acceptable at 0.077 which is slightly lower than the recommended maximum level of 0.08. Therefore, whilst the RMSEA and X^2/df statistic are acceptable, the model requires further work to ensure a better fit. As identified by Hair *et al.* (2010) the standardised factor loadings should be examined and each loading should have a minimum loading of 0.50 with a preferred loading closer to 0.70. The factor loadings from the first assessment are detailed in Table 5.7.

			Estimate	S.E.	C.R.	P	Std Est
CONF	<---	CAREERMNG	.842	.087	9.673	***	.885
ESB	<---	EMPLOY	1.000	.116	8.583	***	.872
CA	<---	CAPITAL	.796	.065	12.300	***	.736
CKN	<---	CAPITAL	1.000				.867
DETERM	<---	CAREERMNG	1.000				.973
COMMIT	<---	CAREERMNG	.525	.055	9.554	***	.801
EMA	<---	EMPLOY	1.000				.738
CKN5	<---	CKN	1.000				.750
CA4	<---	CA	.661	.058	11.405	***	.551
CMM1	<---	COMMIT	1.000				.613
CMM2	<---	COMMIT	1.528	.136	11.250	***	.670
CMM3	<---	COMMIT	1.374	.114	12.068	***	.750
CMM4	<---	COMMIT	1.104	.110	10.069	***	.576
CMD2	<---	DETERM	1.109	.092	12.051	***	.723
EMA1	<---	EMA	.694	.092	7.556	***	.463
EMA3	<---	EMA	1.061	.114	9.324	***	.645
ESB2	<---	ESB	.929	.091	10.261	***	.581
ESB3	<---	ESB	1.031	.090	11.442	***	.674
ESB4	<---	ESB	.749	.082	9.094	***	.500
CMD1	<---	DETERM	1.000				.575
CMD4	<---	DETERM	1.133	.093	12.187	***	.736
CMD3	<---	DETERM	.561	.072	7.747	***	.403
CA3	<---	CA	.704	.054	13.070	***	.628
CKN1	<---	CKN	.654	.051	12.712	***	.610
CKN2	<---	CKN	.711	.059	12.155	***	.584
CA1	<---	CA	1.000				.773
CA2	<---	CA	1.004	.060	16.781	***	.813
CKN3	<---	CKN	.646	.050	12.985	***	.622
CKN4	<---	CKN	.808	.066	12.201	***	.586
CMC1	<---	CONF	1.000				.582
CMC2	<---	CONF	1.013	.087	11.601	***	.729
ESB1	<---	ESB	1.000				.610
CMC4	<---	CONF	.821	.077	10.727	***	.644
CMC3	<---	CONF	1.054	.112	9.372	***	.534
EMA2	<---	EMA	1.000				.595

Table 5.7 – Amos text output for all constructs

As discussed by Awang (2014) determining Unidimensionality is the first step in validating the measurement model and this should be undertaken prior to assessing the validity and reliability of the latent constructs. Unidimensionality is said to be achieved “when all measuring items have acceptable factor loading for the respective latent construct” (Awang, 2014). Hair *et al.* (2010) suggest for newly developed items, a minimum factor loading of 0.5 should be achieved and 0.6 or higher for established items. Whilst the items used within this study have been utilised from existing scale sets from prior studies, their use within the context of part-time students is new. EFA during Stage 1 has been utilised to validate the scale and therefore a minimum factor loading of 0.6 is preferred. However, 0.5 is considered

acceptable based on the items being used within a new concept. Awang (2014) suggests the item with the lowest factor loading should be omitted from the model and the process continued until unidimensionality is achieved. Analysis of Table 5.6 identifies a number of factors with relatively low loadings. In accordance with the guidance from Awang, the item with the lowest loading, CMD3, is omitted in the first revised iteration of the measurement model.

Iteration 1 – omission of CMD3

The omission of item CMD3 ‘*At this time, it is important for me to work at the job I prefer*’ resulted in little improvement in the overall model fit. The test yields a χ^2 statistic of 1187.986 with a χ^2/df statistic of 3.783 which is within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The GFI index has however increased slightly to 0.839 and the CFI =0.828 and whilst an improvement on the first attempt, the results are still below the recommended level of 0.9. The RMSEA is however acceptable at 0.076 which is slightly lower than the recommended maximum level of 0.08. Therefore, whilst the RMSEA and χ^2/df statistic are acceptable, the model requires further work to ensure a better fit. As identified by Awang (2014) the standardised factor loadings should be further examined and consideration given to removing the lowest factor. The factor loadings from iteration 1 are detailed in Table 5.8

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.854	.088	9.678	***	.893
ESB	<---	EMPLOY	.984	.114	8.646	***	.868
CA	<---	CAPITAL	.777	.063	12.255	***	.727
CKN	<---	CAPITAL	1.000				.878
DETERM	<---	CAREERMNG	1.000				.979
COMMIT	<---	CAREERMNG	.525	.055	9.492	***	.795
EMA	<---	EMPLOY	1.000				.741
CKN5	<---	CKN	1.000				.752
CA4	<---	CA	.654	.058	11.310	***	.547
CMM1	<---	COMMIT	1.000				.615
CMM2	<---	COMMIT	1.521	.135	11.254	***	.669
CMM3	<---	COMMIT	1.372	.113	12.091	***	.751
CMM4	<---	COMMIT	1.094	.109	10.029	***	.572
CMD2	<---	DETERM	1.114	.094	11.909	***	.719
EMA1	<---	EMA	.685	.090	7.570	***	.460
EMA3	<---	EMA	1.049	0.112	9.398	***	.643
ESB2	<---	ESB	.934	.091	10.284	***	.584
ESB3	<---	ESB	1.034	.090	11.443	***	.675
ESB4	<---	ESB	.744	.082	9.029	***	.496
CMD1	<---	DETERM	1.000				.569
CMD4	<---	DETERM	1.147	.095	12.088	***	.737

			Estimate	S.E.	C.R.	P	Standard Est
CA3	<---	CA	.703	.054	13.087	***	.629
CKN1	<---	CKN	.650	.051	12.715	***	.608
CKN2	<---	CKN	.710	.058	12.202	***	.584
CA1	<---	CA	1.000				.776
CA2	<---	CA	.998	.060	16.703	***	.812
CKN3	<---	CKN	.641	.049	12.976	***	.619
CKN4	<---	CKN	.811	.066	12.315	***	.589
CMC1	<---	CONF	1.000				.584
CMC2	<---	CONF	1.008	.087	11.646	***	.728
ESB1	<---	ESB	1.000				.610
CMC4	<---	CONF	.818	.076	10.772	***	.644
CMC3	<---	CONF	1.053	.112	9.417	***	.535
EMA2	<---	EMA	1.000				.600

Table 5.8 Iteration 1 – Omission of item CMD3

Within the construct market awareness, item EMA1 ‘*Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals*’ has the lowest factor loading of 0.460. Whilst items EMA2 and EMA3 have a reasonable factor loading of 0.600 and 0.643 respectively, the removal of item EMA1 would reduce the overall reliability of the construct due to the construct having just two items. Hair *et al.* (2010) recommends a minimum of three items per construct. In addition, AMOS does not recognise constructs with less than three items. A low Cronbach’s alpha post-hoc reliability test during Stage 1 EFA indicated potential issues with the construct market awareness. Based on this and the low factor loading for item EMA1, the construct of market awareness is removed from the measurement model. Whilst this is an important aspect of employability, it cannot be validated within this measurement model.

Iteration 2 – omission of market awareness

The removal of construct market awareness resulted in little improvement in the overall model fit. The test yields a X^2 statistic of 979.560 with a X^2/df statistic of 4.015 which is within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010) but higher than iteration 1. The GFI index has however increased to 0.850 and the CFI =0.840 and whilst an improvement on the previous attempt, the results are still below the recommended level of 0.9. The badness-of-fit index RMSEA is just acceptable at 0.079 which is slightly lower than the recommended maximum level of 0.08. Therefore, whilst the RMSEA and X^2/df statistic are acceptable, the model requires further

adjustment to ensure a better fit through removing the lowest factor. The factor loadings from iteration 2 are detailed in Table 5.9.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.851	.090	9.477	***	.897
CA	<---	CAPITAL	.780	.064	12.191	***	.726
CKN	<---	CAPITAL	1.000				.880
DETERM	<---	CAREERMNG	1.000				.975
COMMIT	<---	CAREERMNG	.531	.057	9.390	***	.798
CKN5	<---	CKN	1.000				.747
CA4	<---	CA	.650	.058	11.252	***	.545
CMM1	<---	COMMIT	1.000				.613
CMM2	<---	COMMIT	1.521	.136	11.200	***	.667
CMM3	<---	COMMIT	1.386	.115	12.102	***	.757
CMM4	<---	COMMIT	1.094	.110	9.987	***	.570
CMD2	<---	DETERM	1.110	.095	11.681	***	.713
CMD1	<---	DETERM	1.000				.566
CA3	<---	CA	.703	.054	13.104	***	.630
CKN1	<---	CKN	.659	.052	12.767	***	.613
CKN2	<---	CKN	.715	.059	12.181	***	.586
CA1	<---	CA	1.000				.777
CA2	<---	CA	.997	.060	16.704	***	.812
CKN3	<---	CKN	.649	.050	13.004	***	.624
CKN4	<---	CKN	.807	.067	12.128	***	.583
CMC1	<---	CONF	1.000				.573
CMC2	<---	CONF	1.023	.090	11.412	***	.725
CMC4	<---	CONF	.842	.079	10.678	***	.651
CMC3	<---	CONF	1.081	.116	9.356	***	.539
ESB4	<---	EMPLOY	.747	.083	9.056	***	.498
ESB3	<---	EMPLOY	1.034	.091	11.427	***	.674
ESB2	<---	EMPLOY	.935	.091	10.278	***	.583
ESB1	<---	EMPLOY	1.000				.609
CMD4	<---	DETERM	1.163	.097	11.981	***	.743

Table 5.9 Iteration 2 – Omission on construct Market Awareness

Within the construct self-belief, item ESB4 ‘I know what kinds of work would suit my personality’ has the lowest factor loading of 0.498. As suggested by Hair *et al.* (2018) even for new items, a minimum factor loading of 0.50 should be achieved. Item ESB4 is subsequently omitted within the third iteration of the measurement model.

Iteration 3– omission of Item ESB4

The omission of Item ESB4 resulted in some improvement in the overall model fit. The test yields a X^2 statistic of 879.273 with a X^2/df statistic of 3.961, which is within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The GFI index has

increased to 0.859 and the CFI =0.852 and whilst an improvement on the previous attempt, the results are still below the recommended level of 0.9. The badness-of-fit index RMSEA remains unchanged at 0.079 which is slightly lower than the recommended maximum level of 0.08. Therefore, whilst the RMSEA and X^2/df statistic are acceptable, the model requires further adjustment to ensure a better fit through removing the lowest factor. The factor loadings from iteration 3 are detailed in Table 5.10.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.858	.090	9.522	***	.896
CA	<---	CAPITAL	.781	.064	12.199	***	.727
CKN	<---	CAPITAL	1.000				.879
DETERM	<---	CAREERMNG	1.000				.976
COMMIT	<---	CAREERMNG	.526	.056	9.329	***	.796
CKN5	<---	CKN	1.000				.748
CA4	<---	CA	.649	.058	11.249	***	.544
CMM1	<---	COMMIT	1.000				.611
CMM2	<---	COMMIT	1.528	.137	11.154	***	.668
CMM3	<---	COMMIT	1.394	.116	12.042	***	.758
CMM4	<---	COMMIT	1.097	.110	9.939	***	.570
CMD2	<---	DETERM	1.111	.095	11.669	***	.714
CMD1	<---	DETERM	1.000				.566
CA3	<---	CA	.703	.054	13.134	***	.631
CKN1	<---	CKN	.654	.052	12.688	***	.609
CKN2	<---	CKN	.715	.059	12.192	***	.586
CA1	<---	CA	1.000				.777
CA2	<---	CA	.994	.060	16.691	***	.811
CKN3	<---	CKN	.648	.050	12.986	***	.623
CKN4	<---	CKN	.809	.066	12.173	***	.585
CMC1	<---	CONF	1.000				.580
CMC2	<---	CONF	1.016	.088	11.547	***	.729
CMC4	<---	CONF	.825	.077	10.702	***	.646
CMC3	<---	CONF	1.059	.113	9.353	***	.535
ESB3	<---	EMPLOY	1.020	.076	13.424	***	.774
ESB2	<---	EMPLOY	.750	.073	10.261	***	.544
ESB1	<---	EMPLOY	1.000				.709
CMD4	<---	DETERM	1.159	.097	11.941	***	.742

Table 5.10 Iteration 3 – Omission of Item ESB4

Within the construct confidence, item CMC3 ‘*I don’t find it difficult to prove my capability to others*’ has the lowest factor loading of 0.535. Whilst a factor loading of 0.50 or higher is considered acceptable for new items, a factor loading of 0.60 or higher is preferred. As the measurement model does not meet the goodness of fit index, item CMC3 is omitted within Iteration 4.

Iteration 4– omission of Item CMC3

Item CMC3 was omitted and this resulted in some improvement in the overall model fit. The test yields a X^2 statistic of 794.056 with a X^2/df statistic of 3.951, which is lower than the previous iteration and within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The GFI index has increased to 0.866 and the CFI =0.860 and again, whilst an improvement on the previous attempt, the results are still below the recommended level of 0.9. The badness-of-fit index RMSEA remains unchanged at 0.079 which is slightly lower than the recommended maximum level of 0.08. Therefore, whilst the RMSEA and X^2/df statistic are acceptable, the model requires further adjustment to ensure a better fit through removing the lowest factor. The factor loadings from iteration 4 are detailed in Table 5.11.

			Estimate	S.E.	C.R.	P	Standard Estimate
CONF	<---	CAREERMNG	.864	.090	9.587	***	.869
CA	<---	CAPITAL	.796	.065	12.268	***	.734
CKN	<---	CAPITAL	1.000				.870
DETERM	<---	CAREERMNG	1.000				.965
COMMIT	<---	CAREERMNG	.527	.056	9.361	***	.799
CKN5	<---	CKN	1.000				.749
CA4	<---	CA	.650	.058	11.292	***	.546
CMM1	<---	COMMIT	1.000				.609
CMM2	<---	COMMIT	1.532	.137	11.146	***	.668
CMM3	<---	COMMIT	1.394	.116	12.019	***	.756
CMM4	<---	COMMIT	1.106	.111	9.981	***	.573
CMD2	<---	DETERM	1.106	.094	11.780	***	.719
CMD1	<---	DETERM	1.000				.572
CA3	<---	CA	.705	.053	13.172	***	.632
CKN1	<---	CKN	.652	.052	12.637	***	.608
CKN2	<---	CKN	.711	.059	12.123	***	.584
CA1	<---	CA	1.000				.777
CA2	<---	CA	.994	.059	16.749	***	.810
CKN3	<---	CKN	.649	.050	13.011	***	.625
CKN4	<---	CKN	.809	.066	12.171	***	.586
CMC4	<---	CONF	.792	.073	10.781	***	.643
ESB3	<---	EMPLOY	1.016	.075	13.482	***	.777
ESB2	<---	EMPLOY	.733	.072	10.143	***	.536
ESB1	<---	EMPLOY	1.000				.714
CMD4	<---	DETERM	1.136	.095	11.944	***	.735
CMC1	<---	CONF	1.000				.601
CMC2	<---	CONF	1.001	.085	11.818	***	.744

Table 5.11 Iteration 4 – Omission of Item CMC3

Iteration 4 identifies ESB2 has having the lowest factor loading. However, the omission of this item would leave just two items within the construct of self-belief and the dependent variable of Employability. Hair *et al.* (2018) also indicates that the researcher should consider the deletion of items carefully and in consideration of

other factors and the theory supporting the construct. Items ESB2 will therefore be retained within the measurement model due to the contribution it makes to the construct and the two other items exceeding the suggested loading of 0.60. The next lowest factor loading has therefore been considered and identified as CA4 ‘*All I want to do now is to pursue the career that is inspiring me*’ with a factor loading of 0.546. Whilst a factor loading of 0.50 or higher is considered acceptable for new items, a factor loading of 0.60 or higher is preferred. As the measurement model does not meet the goodness of fit indices, item CA4 is omitted within iteration 5.

Iteration 5– omission of Item CA4

Again the omission of an item, being CA4 resulted in an improvement in the overall model fit. The test yields a X² statistic of 703.699 with a X²/df statistic of 3.888, which is lower than the previous iteration and within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The GFI index has increased to 0.875 and the CFI =0.871 and again, whilst an improvement on the previous attempt, the results are still below the recommended level of 0.9. The badness-of-fit index RMSEA is 0.078 which is slightly lower than the recommended maximum level of 0.08. Therefore whilst the RMSEA and X²/df statistic are acceptable and the goodness-of-fit index closer to the recommended level of 0.9, low factor loadings are still evident in the measurement model and there is therefore potential for further improvement, the model therefore requires further adjustment to ensure a better fit through removing the lowest factor. The factor loadings from iteration 5 are detailed in Table 5.12.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.877	.092	9.561	***	.876
CA	<---	CAPITAL	.802	.065	12.368	***	.754
CKN	<---	CAPITAL	1.000				.885
DETERM	<---	CAREERMNG	1.000				.965
COMMIT	<---	CAREERMNG	.528	.057	9.279	***	.791
CKN5	<---	CKN	1.000				.748
CMM1	<---	COMMIT	1.000				.612
CMM2	<---	COMMIT	1.522	.137	11.135	***	.666
CMM3	<---	COMMIT	1.392	.116	12.039	***	.758
CMM4	<---	COMMIT	1.097	.110	9.952	***	.571
CMD2	<---	DETERM	1.116	.096	11.684	***	.720
CMD1	<---	DETERM	1.000				.568
CA3	<---	CA	.711	.055	13.022	***	.636
CKN1	<---	CKN	.653	.052	12.650	***	.608
CKN2	<---	CKN	.714	.059	12.148	***	.585
CA1	<---	CA	1.000				.775
CA2	<---	CA	.986	.062	16.006	***	.801

			Estimate	S.E.	C.R.	P	Standard Est
CKN3	<---	CKN	.649	.050	12.998	***	.625
CKN4	<---	CKN	.810	.067	12.178	***	.586
CMC4	<---	CONF	.792	.073	10.802	***	.642
ESB3	<---	EMPLOY	1.016	.075	13.490	***	.776
ESB2	<---	EMPLOY	.733	.072	10.150	***	.536
ESB1	<---	EMPLOY	1.000				.714
CMD4	<---	DETERM	1.147	.097	11.851	***	.737
CMC1	<---	CONF	1.000				.601
CMC2	<---	CONF	1.002	.084	11.862	***	.745

Table 5.12 Iteration 5 – Omission of Item CA4

Iteration 5 identifies CMD1 with the lowest factor loading. However, the omission of this item would leave just two items within the construct of determination. As previously identified, Hair *et al.* (2018) indicates that the researcher should consider the deletion of items carefully and in consideration of other factors and the theory supporting the construct. Item CMD1 will therefore be retained within the measurement model due to the contribution it makes to the construct and the two other items exceeding the suggested loading of 0.60. The next lowest factor loading has therefore been considered and identified at CMM4 with a factor loading of 0.571. Whilst a factor loading of 0.50 or higher is considered acceptable for new items, a factor loading of 0.60 or higher is preferred. As the measurement model does not meet the goodness of fit index, item CMM4 is omitted within iteration 6.

Iteration 6– omission of Item CMM4

Item CMM4 was subsequently omitted and this resulted in an improvement in the overall model fit. The test yields a X^2 statistic of 639.570 with a X^2/df statistic of 3.948, which is lower than the previous iteration and within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The GFI index has increased to 0.880 and the CFI =0.876 and again, whilst an improvement on the previous attempt, the results are still below the recommended level of 0.9. The badness-of-fit index RMSEA is 0.079 which is slightly lower than the recommended maximum level of 0.08. Therefore, whilst the RMSEA and X^2/df statistic are acceptable and the goodness-of-fit index closer to the recommended level of 0.9, low factor loadings are still evident in the measurement model and there is therefore potential for further improvement to ensure a better fit through removing the lowest factor. The factor loadings from iteration 6 are detailed in Table 5.13.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.883	.092	9.569	***	.882
CA	<---	CAPITAL	.789	.064	12.274	***	.747
CKN	<---	CAPITAL	1.000				.893
DETERM	<---	CAREERMNG	1.000				.971
COMMIT	<---	CAREERMNG	.517	.057	9.073	***	.780
CKN5	<---	CKN	1.000				.749
CMM1	<---	COMMIT	1.000				.609
CMM2	<---	COMMIT	1.559	.142	10.992	***	.680
CMM3	<---	COMMIT	1.403	.121	11.643	***	.761
CMD2	<---	DETERM	1.124	.097	11.646	***	.721
CMD1	<---	DETERM	1.000				.565
CA3	<---	CA	.708	.055	12.967	***	.635
CKN1	<---	CKN	.651	.052	12.630	***	.607
CKN2	<---	CKN	.716	.059	12.214	***	.588
CA1	<---	CA	1.000				.777
CA2	<---	CA	.983	.062	15.892	***	.801
CKN3	<---	CKN	.646	.050	12.953	***	.622
CKN4	<---	CKN	.808	.066	12.163	***	.585
CMC4	<---	CONF	.792	.073	10.837	***	.643
ESB3	<---	EMPLOY	1.016	.075	13.500	***	.776
ESB2	<---	EMPLOY	.735	.072	10.166	***	.537
ESB1	<---	EMPLOY	1.000				.714
CMD4	<---	DETERM	1.155	.098	11.802	***	.737
CMC1	<---	CONF	1.000				.602
CMC2	<---	CONF	.998	.084	11.871	***	.743

Table 5.13 Iteration 6 – Omission of Item CMM4

Excluding items ESB2 and CMD, which have already been discussed and retained, Iteration 6 identifies two items within the construct knowledge and networks with the lowest factor loadings. The lowest factor loading CKN4 ‘*I can use my professional networks and business contacts to develop my career*’ with a factor loading of 0.585 is omitted first although it is anticipated that item CKN2 will also need to be omitted to achieve a good overall model fit.

Iteration 7– omission of Item CKN4

Omission of item CKN4 resulted in an improvement in the overall model fit. The test yields a X^2 statistic of 507.521 with a X^2/df statistic of 3.524, which is lower than the previous iteration and within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The goodness-of-fit (GFI) indices has increased to 0.900 and the CFI =0.899. Whilst this is an improvement on the previous attempt and GFI meets the minimum level for GFI, the CFI is slightly below the recommended level of 0.9. The badness-of-fit index RMSEA is 0.073 which is lower than the recommended maximum level of 0.08. Therefore, the RMSEA and X^2/df statistic are acceptable and the goodness-

of-fit index is closer to the recommended level of 0.9, low factor loadings are still evident in the measurement model and there is therefore potential for further improvement. The factor loadings from iteration 7 are detailed in Table 5.14.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.868	.091	9.533	***	.878
CA	<---	CAPITAL	.820	.069	11.856	***	.742
CKN	<---	CAPITAL	1.000				.906
DETERM	<---	CAREERMNG	1.000				.975
COMMIT	<---	CAREERMNG	.520	.057	9.147	***	.784
CKN5	<---	CKN	1.000				.706
CMM1	<---	COMMIT	1.000				.613
CMM2	<---	COMMIT	1.545	.140	11.031	***	.678
CMM3	<---	COMMIT	1.394	.119	11.714	***	.761
CMD2	<---	DETERM	1.125	.096	11.706	***	.723
CMD1	<---	DETERM	1.000				.566
CA3	<---	CA	.705	.055	12.929	***	.632
CKN1	<---	CKN	.718	.057	12.564	***	.631
CKN2	<---	CKN	.781	.065	12.061	***	.604
CA1	<---	CA	1.000				.777
CA2	<---	CA	.984	.062	15.918	***	.802
CKN3	<---	CKN	.680	.055	12.314	***	.618
CMC4	<---	CONF	.806	.074	10.841	***	.651
ESB3	<---	EMPLOY	1.012	.075	13.548	***	.776
ESB2	<---	EMPLOY	.728	.072	10.148	***	.535
ESB1	<---	EMPLOY	1.000				.717
CMD4	<---	DETERM	1.149	.097	11.828	***	.735
CMC1	<---	CONF	1.000				.599
CMC2	<---	CONF	.992	.085	11.690	***	.735

Table 5.14 Iteration 7 – Omission of Item CKN4

With minor exceptions for CMC1 which has a factor loading close to 0.600 and CMD1 and ESB2, all other factors achieve the minimum recommended level of 0.600 as suggested by Hair *et al.* (2010). Therefore, all factors as detailed in Table 5.14 can be retained although it is suggested that the model could be modified to improve the fit for CFI. One approach to improving the overall model fit is to consider the Modification Indices (MI) (Hair *et al.* 2010) although this is guided by theory, and items are not omitted purely to improve the model fit. MIs relate to the covariance and error terms which may have been incorrectly specified and potential cross loadings. Table 5.15 illustrates potential cross loadings between items in CKN e1 <--> e5 with a MI of 16.390, e5 <--> e3 with a MI of 19.835 and e5 <--> e4 with a MI of 19.551. Awang (2014) acknowledges that one of the factors associated with these error terms could be eliminated. On this basis error term e5 demonstrates the most correlation between the other two error terms and is linked to all three high MI. However, e5 relates to the question of ‘*I have become skilful in my subject*

specialism ' and is considered an important factor to retain. Skills, knowledge and attributes are widely associated within the concept of human capital within the literature and links to knowledge within the proposed measurement model. Omitting this factor would reduce the elements of skills, knowledge and attributes and on this basis it is not appropriate to omit it. An alternative to omitting a factor where the MI is higher than 15.000 (Hair *et al.*, 2010), is to set two correlated measurement errors as a free parameter and run the model again.

Each of the error terms were therefore investigated and through creating a free parameter between e5 and e1, the overall model fit was improved without the need to omit any further items or constructs. The revised measurement model which satisfies the model fit indices is attached at Appendix 9.

The re-testing of the model yields a X² statistic of 481.626 with a X²/df statistic of 3.368, which is lower than the previous iteration and within the level of acceptance of 5.0 as suggested by Hair *et al.* (2010). The GFI index has increased to 0.905 and the CFI =0.905, both therefore exceeding the recommended level of 0.9. The badness-of-fit index RMSEA is 0.070 which is lower than the recommended maximum level of 0.08. Therefore, the RMSEA and X²/df statistic are acceptable. The factor loadings from iteration 8 are detailed in Table 5.15.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.862	.091	9.516	***	.877
CA	<---	CAPITAL	.822	.069	11.880	***	.741
CKN	<---	CAPITAL	1.000				.856
DETERM	<---	CAREERMNG	1.000				.974
COMMIT	<---	CAREERMNG	.520	.057	9.167	***	.787
CKN5	<---	CKN	1.000				.745
CMM1	<---	COMMIT	1.000				.612
CMM2	<---	COMMIT	1.552	.140	11.049	***	.680
CMM3	<---	COMMIT	1.392	.119	11.699	***	.759
CMD2	<---	DETERM	1.120	.095	11.731	***	.723
CMD1	<---	DETERM	1.000				.569
CA3	<---	CA	.705	.055	12.919	***	.632
CA1	<---	CA	1.000				.777
CA2	<---	CA	.985	.062	15.914	***	.802
CMC4	<---	CONF	.811	.075	10.820	***	.653
ESB3	<---	EMPLOY	1.011	.074	13.575	***	.775
ESB2	<---	EMPLOY	.728	.072	10.152	***	.534
ESB1	<---	EMPLOY	1.000				.717
CMD4	<---	DETERM	1.143	.097	11.842	***	.734
CMC1	<---	CONF	1.000				.597

			Estimate	S.E.	C.R.	P	Standard Est
CMC2	<---	CONF	.995	.086	11.635	***	.735
CKN1	<---	CKN	.753	.061	12.258	***	.698
CKN2	<---	CKN	.736	.061	12.081	***	.600
CKN3	<---	CKN	.666	.052	12.799	***	.638

Table 5.15 Iteration 8 – Modification Indices between error terms e1 and e5.

The unidimensionality analysis for the proposed measurement models is detailed in Table 5.16

CFA MODEL FIT	Level of Acceptance	Initial Model	Iteration 1	Iteration 2	Iteration 3	Iteration 4	Iteration 5	Iteration 6	Iteration 7	Iteration 8
Chi-square		1298.726 p=0.000	1187.986 p=0.000	979.560 p=0.000	879.273 p=0.000	794.056 p=0.000	703.699 p=0.000	639.570 p=0.000	507.521 p=0.000	481.626 p=0.000
DF		340	314	244	222	201	181	162	144	143
CMIN/DF	Between 2.0 & 5.0 acceptable	3.607	3.783	4.015	3.961	3.951	3.888	3.948	3.524	3.367
Incremental Fit CFI	>0.9	.810	.828	.840	.852	.860	.871	.876	.899	.905
Absolute Fit GFI	>0.9	.818	.839	.850	.859	.866	.875	.880	.900	.905
Absolute Fit RMSEA	<0.08	.072	.076	0.79	0.79	.079	.078	.079	.073	.070

Table 5.16 Unidimensional Analysis for Proposed Employability Measurement Model

5.5 Reliability Analysis for the Measurement Model

In order to assess the internal consistency and reliability and validity of the measurement model, *Hair et al.* (2010) recommends the use of construct reliability (CR) and the average variance extracted (AVE), where CR is the “*degree to which assets of indicators of a latent construct is internally consistent based on how highly interrelated the indicators are with each other*” (*Hair et al.*, 2010, p. 636). Internal consistency in the measurement scale can be claimed when the CR is high as this demonstrates that the measures applied collectively signify the same latent construct. A minimum CR value of 0.7 is therefore recommended by *Hair et al.* (2010) to support the construct as being reliable.

The factor loadings for each construct as discussed in the unidimensionality analysis should have a minimum value of 0.5 (Fornell and Larcker, 1981) which has been

achieved in the refined proposed measurement model. Items less than 0.50 have been omitted and the factor loadings in the final model iteration range from 0.534 as lowest factor to 0.802 the highest factor loading. Hair *et al.* (2010) concurs with Fornell and Larckers' (1981) minimum recommendation of 0.50 but suggest values which exceed 0.70 as being more reliable. Hair *et al.* (2010) further suggest the AVE as an alternative measure of reliability. Hair *et al.* (2010) suggest a minimum AVE value of 0.50 to represent the convergence of the latent constructs, the range being between zero and one. Validity is therefore considered to have been achieved where the CR is greater than 0.70 and the AVE is higher than 0.50 (Hair *et al.*, 2010). However, Awang (2014) suggest an AVE in excess of 0.40 is acceptable particularly when adopting a second order factor model.

The findings for AVE and CR are presented in Table 5.17. The CR for all constructs exceed 0.70 and the AVE ranges from 0.4410 to 0.5488. However, as the constructs and model comprise of second order structure and the individual factor loads all exceed the minimum recommendation of 0.50, the reliability of the model is confirmed.

Latent Constructs	Items - Scale	Factor loading	AVE	CR
Capital – Knowledge and Networks	I have become skilful in my subject specialism	0.698	0.4523	0.770
	My skills for doing the type of work I want to do are up to date	0.600		
	I can gain support from other for recommendations and ideas	0.638		
	I am able to build wide and effective networks of contacts to achieve my goals	0.745		
Capital – Ambition	I have chosen a career path that will give a purpose to my life	0.777	0.5488	0.780
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful	0.802		
	I have a future career direction that would be meaningful for me	0.632		
Career Management – Confidence	I know where to find out information about jobs that interest me	0.597	0.4410	0.700
	I can explain the value of my experience to a potential employer	0.735		
	I can structure information in a way that meets the needs of my audience	0.653		
Career Management – Commitment	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person	0.612	0.4710	0.730
	When I decide to do something about my career, I go right to work on it.	0.680		

	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful	0.759		
Career Management – Determination	I know what I want to do when I finish my degree	0.569	0.4621	0.720
	I know what is required from me to successfully secure the sort of work I want to do	0.723		
	When I make plans for my career, I am confident I can make them work	0.734		
Employability – Self-belief	An employer would be impressed with my qualifications	0.717	0.4666	0.720
	I find it easy to quickly gain respect from others	0.534		
	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers	0.775		

Table 5.17 Findings of AVE and CR

Notes: Average Variance Extracted = (AVE), Construct Reliability = (CR)

5.6 Validity Analysis for the Measurement Model

The next stage in the development of the measurement model is the analysis of its validity which determines how well a measure indicates if it is an unobservable construct (Hair *et al.*, 2010).

5.6.1 Face Validity

Test items need to be representative of the constructs they are supposed to measure and this is termed face validity. As indicated by Hair *et al.* (2010) without understanding the meaning and content of each item, it is not possible to determine a measurement theory. The measurement theory can therefore be tested through utilising scales developed from previous research but as explained by Hair *et al.* (2010), even utilising scales from validated measurement scales from other research does not guarantee face validity.

Stage 1 of this study does however, enable the subjective judgement of the scales utilised within Stage 2, where EFA led to the omission of some items and ambiguous questions. Based on this, the study instrument utilised in Stage 2 of this study, face validity can be assumed.

5.6.2 Construct and Discriminant Validity

The construct validity of the measurement is assessed by means of convergent and discriminant validity (Byrne, 2009). This examines the correlations between the construct in the measurement model to ensure they have a theoretical meaning.

Convergent validity is assumed when the constructs are found to share a high proportion of variance and this can be determined from the factor loadings, AVE and reliability. This has been reviewed in section 5.5.1 and confirmed in Table 5.17 and convergent validity can therefore be accepted. Discriminant validity is used to measure the extent to which constructs are significantly different to each other. However, due to use of second order constructs, the test for discriminant validity cannot be fully determined as explained by Xenophon, Babbar and Kaighobadim, (2009). This is based on first-order factors acting as dependent variables and therefore “*reflective indicators of the second-order factor and thus are expected to be highly correlated*” (Xenophon, Babbar, Kaighobadim, 2009 p. 644) and therefore confirms that it is not possible to support both convergent and discriminant validity at the same time. The validity of the model has therefore been determined by both face and convergent validity.

5.7 Measurement Model

Based on the analysis of the data findings from Stage 2 of the primary data collection the application of CFA and the assessment of unidimensionality, reliability and validity, the measurement model for use in the next stage is confirmed in Figure 5.3. The model is considered an acceptable fit.

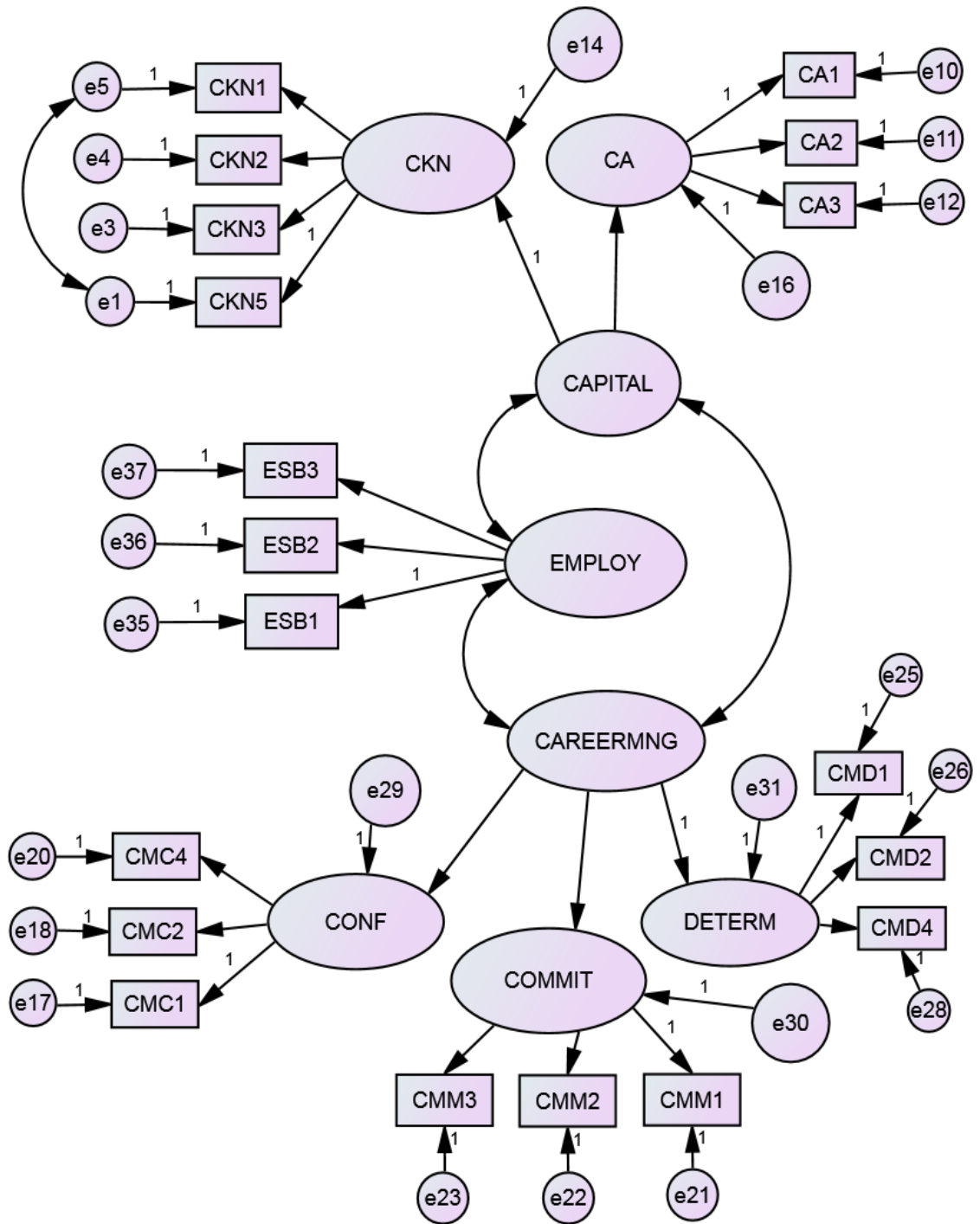


Figure 5.3 Confirmed Measurement Model

Notes: **CKN** = Capital: Knowledge and Networks; **CA** = Capital: Ambition; **CMC** = Career Management: Confidence; **CMD** = Career Management: Determination; **CMM** = Career Management: Commitment; **ESB** = Employability: Self-belief.

To summarise the analysis of the measurement model, the construct market awareness was omitted due to the low factor loadings and limitations associated with potentially having just two items. An item was omitted from each of the remaining constructs to ensure good model fit and factor loadings which generally achieve the preferred value of 0.6. Just three items fell below 0.6 but were still acceptable at 0.5 due to the development of the new model and constructs and previous support from the EFA during stage 1 of the data collection and analysis. The measurement model also meets the goodness-of-fit and badness-of-fit statistics as suggested by Hair *et al.* (2010). Based on the accepted suitability of the measurement model, the next stage of the data analysis can be undertaken to test the structural model through the use of structural equation modelling (SEM).

5.8 Structural Equation Model Development

Further to the assessment of the measurement model and confirmation of the scales, the first iteration of SEM is presented in Figure 5.4. The model yields a X^2 value of 481.626 and the X^2/df statistic of 3.368 is between the levels of 2.0 and 5.0 as recommended by Hair *et al.* (2010). The GFI of 0.905 has been achieved along with a CFI value of 0.905, which exceed the recommended level of 0.900. The RMSEA present a value of 0.070 which is below the suggested upper threshold of 0.80. Overall, the model reflects a good fit based on the GFI index (Hair *et al.* 2010).

As the model reflects an initial good fit and relates to earlier theory and the findings from Stage 1 analysis and EFA, further investigation of potential cross loadings and evaluation of the Modification Indices (MI) is not required.

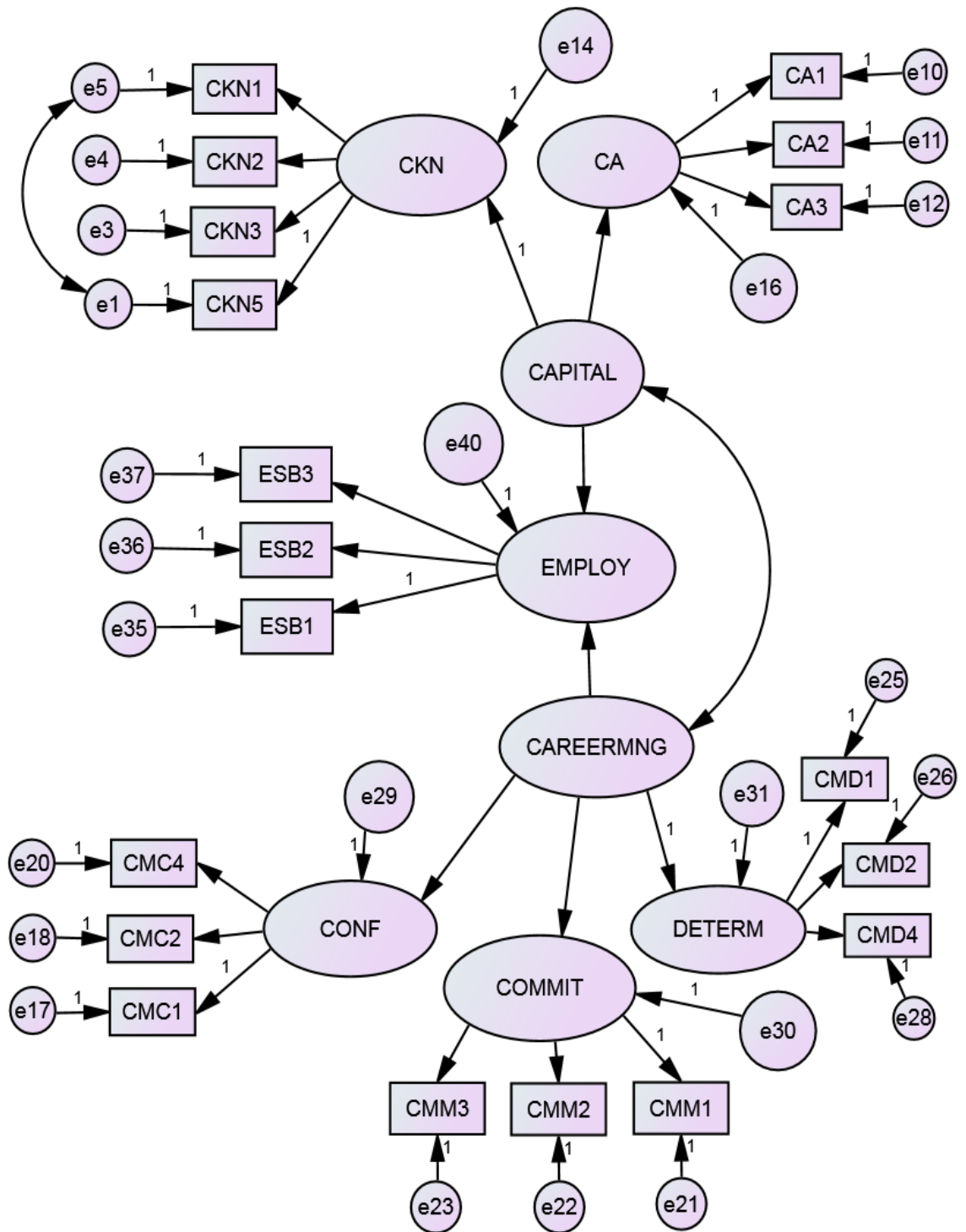


Figure 5.4 SEM Model 1

5.8.1 Assessment of the Hypothesised Model

The standardised estimates detailed in Table 5.18 demonstrate the hypothesised paths along with the significance level for each relationship. The plausibility of the structural relationships within the model are further analysed to determine which paths are significant and considered acceptable as presented in Table 5.19 and illustrated in Figure 5.5.

			Estimate	S.E.	C.R.	P	Standard Est
CONF	<---	CAREERMNG	.862	0.091	9.516	***	0.877
CA	<---	CAPITAL	.822	0.069	11.880	***	0.741
CKN	<---	CAPITAL	1.000				0.856
DETERM	<---	CAREERMNG	1.000				0.974
COMMIT	<---	CAREERMNG	.520	0.057	9.167	***	0.787
EMPLOY	<---	CAPITAL	.239	0.193	1.243	0.214	0.246
EMPLOY	<---	CAREERMNG	.594	0.229	2.591	0.010	0.536

Table 5.18 Results of SEM 1 – Factor loadings and significance levels

	Hypotheses	Path Coefficient	Direction	p-value	Decision
H _{1a}	Knowledge & Networks → Capital	0.856	positive	0.000	accepted
H _{1b}	Ambition → Capital	0.741	positive	0.000	accepted
H _{1c}	Capital → Employability	0.246	positive	0.214	rejected
H _{2a}	Confidence → Career Management	0.877	positive	0.000	accepted
H _{2b}	Determination → Career Management	0.974	positive	0.000	accepted
H _{2c}	Commitment → Career Management	0.787	positive	0.000	accepted
H _{2d}	Career management → Employability	0.536	positive	0.010	accepted

Table 5.19 Structural parameters estimates of the antecedents of employability

H_{1c} is therefore not significant and is rejected. H_{2d} has p value where p= 0.010 which is ≥ 0.01 but < 0.05 and is therefore significant at the 5% level and is accepted.

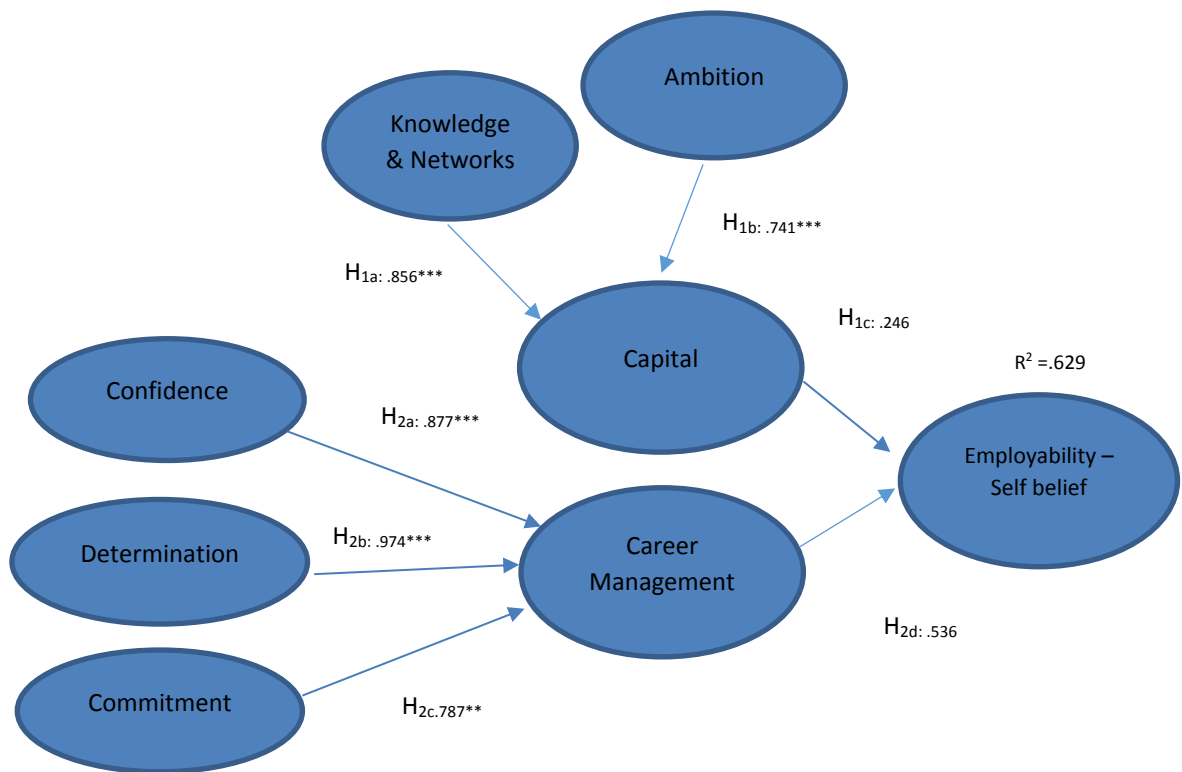


Figure 5.5 SEM Model 1

Notes: Significant relationship \longrightarrow *** Significant at $p < 0.000$

When reviewing all of the structural parameter estimates for SEM Model 1 (Table 5 .19), the parameter between Capital and Employability is positive with a path coefficient of 0.246 but the relationship is not significant at a value of 0.214. According to Hair *et al.* (2010), the significance level should be less than 0.050 and therefore values are considered significant at the 5% level or stronger. This therefore suggests that a positive relationship exists between Capital and Employability but the relationship is not statistically significant and based on SEM Model 1, hypothesis H_{1c} should be rejected. The remaining parameter estimates are however, considered acceptable and analysis of the findings demonstrate that the first order constructs of Ambition and Knowledge and Networks have a positive and significant relationship with Capital. In terms of the confirmation and development of a model, the non-significant structural path could be eliminated. However, based on the positive relationship between the two first order constructs and Capital, it is evident that both Ambition and Knowledge and Networks contribute to the model. However, perhaps

it is the link to the construct Capital, which does not fit, and instead the constructs could have a positive and significant relationship with the construct of Career Management. Whilst a departure from the initial format of the model, it is evident from the antecedents of employability that a relationship exists between skills and career management as demonstrated in Bridgstock's (2009) Career Management model, particularly in terms of the relationship between skills and the working environment. Reference to skills also relate to the construct Knowledge and Networks and it is therefore evident that there is support for this construct to be linked to Career Management. To support this claim, Dacre Pool and Sewell (2007) recognise the association of knowledge, skills and understanding within their CareerEDGE model of Graduate Employability. Therefore, whilst reference to skills and attributes are often associated with human capital as a dimension of employability, particularly in terms of the USEM model (Knight and Yorke, 2003), there is also a correlation to career management. Networks are associated with social capital (Tomlinson, 2017) and Harvey Locke and Morey (2002) associate it with signal management which is conceptualised by Williams *et al.* (2016) as a dimension of career management. Ambition as a construct of Capital could also be aligned to the construct of Career Management in terms of self-management and an individual's appraisal of themselves in terms of their values and goals (Bridgstock, 2009 and Hillage and Pollard). Williams *et al.* (2016) conceptualise self-management as a dimension of career management and it is therefore evident again that close association exists between the constructs of Capital and Career Management. Justification for one second order construct and five first order constructs could therefore better represent the significant factors associated with employability and part-time students. To test this concept further, SEM Model 1 has been modified to reflect the omission of Capital as a second order construct and a direct relationship between all first order constructs connected to Career Management. Figure 5.6 illustrates the revised model for the application of SEM.

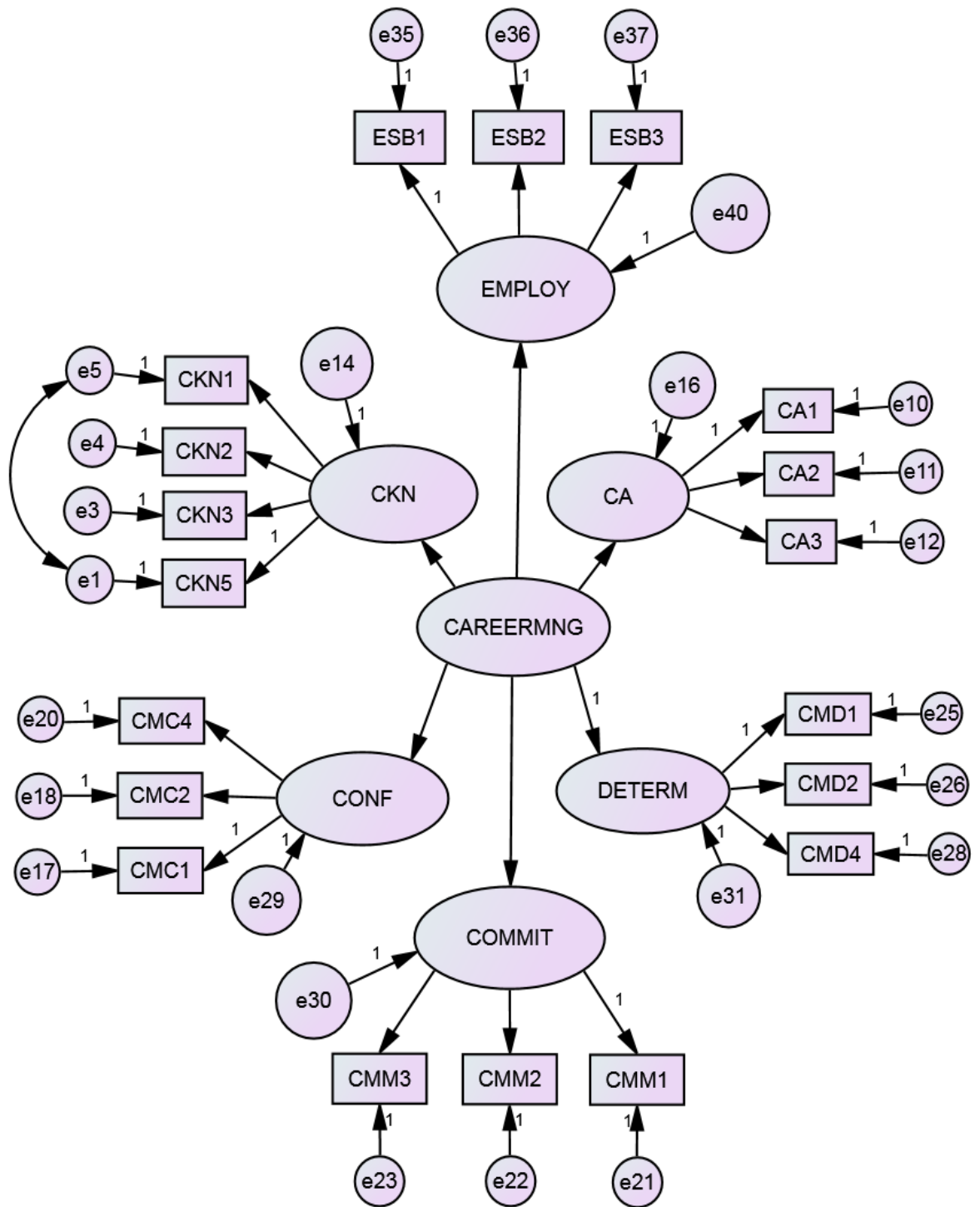


Figure 5.6 SEM Model 2

The standardised estimates detailed in table 5.20 demonstrate the hypothesised paths along with the significance level for each relationship. The findings demonstrate a positive relationship between the five first order constructs and the second order construct of Career Management. A positive relationship between Career Management and Employability also exists. The plausibility of the structural relationships within the model are further analysed to determine which paths are significant and considered acceptable as presented in Table 5.21

			Estimate	S.E.	C.R.	P	Standard Estimate
CONF	<---	CAREERMNG	.861	.091	9.453	***	0.883
DETERM	<---	CAREERMNG	1.000				0.989
COMMIT	<---	CAREERMNG	.519	.057	9.115	***	0.792
EMPLOY	<---	CAREERMNG	.872	.088	9.967	***	0.793
CKN	<---	CAREERMNG	1.183	.108	10.985	***	0.900
CA	<---	CAREERMNG	.952	.093	10.276	***	0.760

Table 5.20 Results of SEM 2 – Factor loadings and significance levels

	Hypotheses	Path Coefficient	Direction	p-value	Decision
H _{1a}	Knowledge & Networks → Career Enhancement	0.900	positive	0.000	accepted
H _{1b}	Ambition → Career Enhancement	0.760	positive	0.000	accepted
H _{1c}	Confidence → Career Enhancement	0.883	positive	0.000	accepted
H _{1d}	Determination → Career Enhancement	0.989	positive	0.000	accepted
H _{1e}	Commitment → Career Enhancement	0.792	positive	0.000	accepted
H _{2a}	Career Enhancement → Employability	0.793	positive	0.000	accepted

Table 5.21 Structural parameters estimates of the antecedents of employability

The revised SEM 2 Model yields a X^2 value of 491.150 and X^2/df statistic of 3.387 and is therefore between the levels of 2.0 and 5.0 as recommended by Hair *et al.* (2010). The GFI of 0.903 has been achieved along with a CFI value of 0.903, which exceeds the recommended level of 0.900. The RMSEA presents a value of 0.071, which is below the suggested upper threshold of 0.8. Overall, the model reflects a good fit based on the Goodness-of-fit indices (Hair *et al.* 2010) and can be accepted

as a model for further evaluation. The model fit also suggests the hypothesised model of employability for part-time students is empirically acceptable and permits further investigation of the hypothesised relationships and no further re-specifications or modifications are required.

The findings from SEM Model 2 (Figure 5.6) confirm that the five first order constructs, Knowledge and Networks; Ambition; Confidence; Commitment and Determination all display a significant association with the second order construct currently referred to as Career Management.

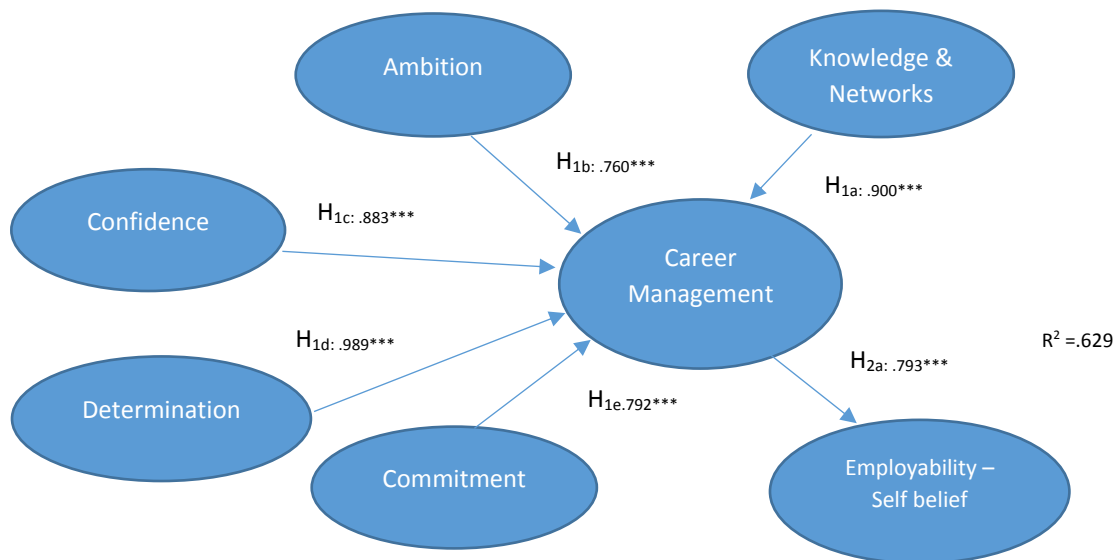


Figure 5.6 SEM Model 2

Notes: Significant relationship \longrightarrow *** Significant at $p < 0.000$

Knowledge and Networks have a significant relationship to the second order construct ($\beta=0.900$, $p=0.000$), hypothesis H_{1a} is therefore supported. Ambition also shows a positive and significant relationship with Career Management ($\beta=0.760$, $p=0.000$), hypothesis H_{1b} is therefore fully supported. The three original first order constructs Confidence ($\beta=0.833$, $p=0.000$); Commitment ($\beta=0.792$, $p=0.000$) and Determination ($\beta=0.989$, $p=0.000$) also demonstrate a significant and positive relationship with Career Management. Hypotheses H_{1c} , H_{1d} and H_{1e} are therefore all supported. The path between Career Management and Employability is also positive and significant ($\beta=0.793$, $p=0.000$) and H_{2a} is therefore supported.

The model therefore yields a squared multiple correlation value (R^2) for Employability with the dependent variable of 0.629. Hair *et al.* (2018, p. 569) identified R^2 as the values which represent “*the extent to which a variable’s variance is explained by a latent factor (s)*”. The model therefore explains that the endogenous latent variable Employability explains 63% of the proportion of variance as explained by the predictor Career Management. The model is therefore accepted as being substantially meaningful.

5.9 Chapter Summary

The process of CFA and SEM undertaken within Stage 2 have been explained within this chapter. The validity of the variables for use in SEM were examined through the use of CFA. A detailed iterative process was adopted to further evaluate the conceptual model posited from Stage 1 of the study in order to achieve an acceptable level on the goodness-of-fit indices. A structural model was subsequently developed and presented based on the CFA. With the exception of the constructs Market Awareness and Esteem, the remaining latent constructs were included with SEM Model 1.

Initial evaluation of SEM Model 1 demonstrated a good fit and SEM was employed to statistically test the research hypotheses. All of the paths indicated a positive and significant relationship with the exception of the path between Capital and Employability. Supported by literature and extant conceptualisations of employability, the model was specified based on the omission of the construct Capital and a direct relationship formed between Career Management and Ambition and Knowledge & Networks. The statistical testing of SEM 2 identified model fit and a positive and significant relationships between all paths.

The final chapter of this study will further consider the statistical model and hypotheses. This will demonstrate the contributions this study makes to both professional practice and knowledge through the presentation of a model of employability for part-time students in HE.

CHAPTER SIX

Discussion, Conclusions and Implications for Knowledge and Professional Practice

6.0 Chapter overview

The aim of this chapter is to discuss and conclude the study. This will include a summary of the research objectives, findings from the literature review and primary data collection and will conclude with the presentation of the CEME model of employability for part-time students. The contribution to knowledge and professional practice are also presented.

6.1 Introduction

The purpose of this thesis is to contribute to the conceptualisations and dimensions of graduate employability but with an emphasis on enhancing the career readiness for part-time students. The thesis has evolved through the investigation and analysis of the research objective:

Identify and empirically assess the antecedents of employability that enhance the employment and career readiness of part-time students

Evaluation of the antecedents of employability and extant conceptualisations have facilitated the development of a model which specifically targets the career readiness for part-time students in HE. The secondary research objectives (ROs) are set out in Chapter 1 and as detailed below have supported the investigation and analysis:

- **RO1** Evaluate critically the antecedents of employability and analyse the context specific conceptualisations in terms of their relevance for part-time students.
- **RO2** Evaluate existing models and frameworks of employability and critically analyse and synthesise their significance for part-time students.

- **RO3** Conduct quantitative research with part-time students to explore and determine their perceptions of the conceptualisations of employability.
- **RO4** Analyse primary findings to gain a better understanding of the conceptualisations of employability, to determine a model of employability which is appropriate for part-time students.
- **RO5** Empirically test the model for assessing employability for part-time students
- **RO6** Draw conclusions from the research to contribute to the employability debate through conceptualising the meanings of employability through the design and development of an employability model and self-assessment tool for part-time students.

The aim of this chapter is therefore to review the findings from the ROs and in particular to discuss the empirical findings created from analysis of the conceptual model presented at the end of Chapter 4 and the hypotheses developed from the findings and analysis in Chapter 5.

The outcome of the research undertaken in the study has culminated in the development of a model of employability for part-time students and a self-assessment tool (Appendix 10), which offers a new dimension to the conceptualisations and antecedents of employability. This chapter will discuss further the structure of the model with an emphasis on demonstrating its contribution to professional practice and knowledge.

6.2 Antecedents of Employability (RO1 & RO2)

Employability has been acknowledged as being “*increasingly complex and multi-dimensional*” (Williams *et al.*, 2016, p. 877) and can be viewed from the multiple perspectives including societal, in terms of the health of the economy and employment rates, along with organisational and individual perspectives (Thijssen *et al.*, 2008). A systematic review of the literature in Chapter 2 therefore sought to evaluate such perspectives and conceptualisations.

Employability both at a local and regional level is important for economic growth (McQuaid *et al.*, 2005) and HE provides opportunities to respond to the demand of the labour market (Cai, 2013). As previously identified by Yorke (2006), employability does not just relate to new graduates but it is also related to an individual's working life and requires refreshing. An individual could therefore possess an undergraduate degree but in order to enhance their career further and respond to a changing labour market, seek to undertake a postgraduate form of study. Employability is therefore a complex subject area and a number of differing perspectives were considered in Chapter 2 to evaluate the conceptualisations of employability and how they relate to part-time students.

The detailed systematic review on the current understanding of employability by Williams *et al.* (2016) contributed to the literature review and framework for the conceptual model presented in Chapter 4. The review by Williams *et al.* (2016) identified Capital as a superordinate dimension with reference to human, social, cultural and psychological as subordinate dimensions. Capital is thereby seen as “*contributing towards the achievement of employability outcome*” which is mediated by both Contextual components and Career Management (Williams *et al.* 2016, p. 880). Reference to human capital and its association with the possession of skills and knowledge features within extant literature and links to being able to compete for a preferred job role. Arthur *et al.* (1995) and Eby *et al.* (2003) conceptualise human capital as the knowledge and skills an individual can contribute to an organisation through both experiential and formal means of learning which links to ‘*knowing how*’ (Williams *et al.* 2016). The other sub-ordinate dimensions of social, cultural and psychological also contribute to the concept of capital, again building on the work of Arthur *et al.* (1995) particularly in terms of ‘*knowing whom*’ which links to networks and contacts (Williams *et al.*, 2016).

Within his Graduate Capital Model, Tomlinson (2017) added identity capital to the four sub-ordinate dimensions of capital as previously depicted in the earlier review by Williams *et al.* (2016). Tomlinson (2017) links identity capital to career insight and the marketing strategies of a graduate to present themselves as employable along with forming working identities. This is also considered within the dimension of Career Management within the work of Williams *et al.* (2016) and ‘*knowing why*’

components associated in the work of Eby *et al.* (2003). Throughout a review of the literature, it is evident that there are differing perspectives on the subject of employability which are largely influenced by the antecedents associated with positional, possessional and processual approaches (Holmes 2013b). Such approaches essentially relate to the earlier work of Arthur *et al.* (1995) and Eby *et al.* (2003) of ‘*knowing how*’, ‘*knowing whom*’ and ‘*know why*’.

Existing models of employability such as USEM (Knight and Yorke, 2003); CareerEDGE (Dacre Pool and Sewell, 2007) and Career Management (Bridgstock, 2009) offer both theoretical and empirical models within the discourse of employability. However, whilst a number of models exist, the primary focus predominantly appears to focus on full-time students and although aspects of the models are transferable, given the overall diversity in the motivation and orientations to study part-time, (Kember, *et al.* 2001) a model of employability to support the academic curriculum for part-time students provides a further contribution to the overall discourse of employability.

The literature review identified that whilst the number of part-time students has declined, part-time study facilitates the development of skills and contributes to economic growth (Callendar and Little). Full-time study is not always feasible, particularly for those who may have dependents or other responsibilities (Hillage and Pollard). Part-time study therefore provides WP opportunities and extends further to improve social mobility (Bennion, 2011). WP is not, however, just about gaining access to HE but also relates to improving prospects including job security and improved financial security, as well as improved wellbeing both to an individual’s mental and physical health (Heaslip, 2017).

Research objectives RO1 and RO2 therefore sought to critically evaluate and review extant literature to gain an understanding of the antecedents and conceptualisations of employability. The value of part-time study was identified through these research objectives and reinforced the importance of such learners is considered in the development of HEI frameworks and strategies for employability. The benefits of part-time study are wide reaching, both at an organisational and individual level. Whilst a number of models of employability already exist, they have not been

designed or developed to offer a model of employability for part-time students. Through evaluating existing models and identifying potential gaps, the research objectives informed the design of the research methodology for the purposes of primary data collection. The systematic review by Williams *et al.* (2016) and the work of Tomlinson (2017); Bridgstock (2009); Knight and Yorke (2003) and Dacre Pool and Sewell (2007) contributed to the first stage of the research methodology and scoping exercise with four part-time students at Birkbeck University to identify their orientations and motivations to study. The participants contributed to the development of a draft questionnaire through responding to questions from extant employability-based questionnaires and existing models such as USEM, CareerEDGE (Dacre Pool and Sewell, 2007) and Career Management (Bridgstock, 2009).

6.3 Conducting Quantitative Research (RO3)

The research objective (RO3) set out to conduct quantitative research for the collection and analysis of primary data collected from a sample of part-time students. The first stage of designing the form of data collection comprised of a scoping exercise and development of a draft questionnaire. This was distributed as a pilot to a number of part-time students at Northumbria University in April 2018. Forty-five respondents completed the questionnaire, which facilitated further analysis and refinement of the final questionnaire for use in Stage 1 of the study. Two North East based HEIs and one central London University kindly agreed to take part in the study, which enabled distribution of the questionnaire in May 2018. This questionnaire formed Stage 1 of the data findings and analysis with 369 valid responses obtained from this stage of the study. Analysis of the findings through the adoption of EFA enabled the validation of the items and scales sets within the questionnaire and the creation of a measurement tool for further analysis. The identification of a number of components from the EFA concluded with the development of a conceptual model and initial hypotheses, which informed the structure and format for Stage 2 of the study.

Stage 2 of the data findings and analysis comprised of the development of the revised questionnaire for the substantive study, based on the validated measurement scales identified from the EFA and Stage 1. To ensure communality amongst the demographics of the respondents, the same participating institutions from Stage 1 of

the study took part in the second survey and distributed the refined questionnaire to their part-time students. The survey closed in March 2019 with 506 responses obtained. Further to unidimensional analysis of the responses and omission of a small number of respondents, 478 valid responses contributed to Stage 2 of the study and investigation through the use of CFA.

6.4 Model Discussion and Assessment of the Hypotheses (R04 & R05)

Exploratory factor analysis (EFA), the form of multivariate analysis adopted within stage one of the data collection, contributed to the development of the conceptual model and hypotheses for further investigation in stage two. The second stage of data collection and analysis employed a new data set and CFA to validate the constructs determined from Stage 1 and assessed the goodness of fit to the data from the second survey. Unidimensional analysis of the second survey data resulted in the omission of the construct Esteem prior to undertaking CFA as explained in Chapter 5.

The employment of CFA presented in Chapter 5 details a number of iterations to the initial model and demonstrated the redundancy of the construct Market Awareness as a result of validity violation. The subsequent application of SEM demonstrated empirical support for six of the eight initial proposed hypothesised relationships. A review of the literature and antecedents of employability identifies Capital as a dimension of employability with the terms being subdivided by Tomlinson (2017) to include human, social, psychological, cultural and identity capital as a form of graduate capital. Williams *et al.* (2015) also conceptualise the terms human, social, psychological, and cultural as a form of capital within the employability domain. Supported by theoretical research, Stage 1 of the data collection explored further a number of scales and variables, which represent the conceptualisations. Through the employment of EFA, the items were analysed further and constructs developed, the outcome being the identification of three constructs. The output was one construct, which was closely associated with human and social capital but better represented as one construct based on the findings of EFA. The redefined construct was thereby named Knowledge and Networks. Knowledge relates to skills and attributes but whereby a full-time student entering HE may be seeking to obtain skills and attributes, a part-time student depending on their personal and work circumstances could arguably have a skill set within their current work setting but is seeking to

develop such skills or arguably to develop new skills as recognised by Kember *et al.* (2001). The label Knowledge therefore captured the scaled items within this construct. Social capital relates to the use of networks for career development and enhancement. Therefore, how a part-time student uses their networks potentially influences their employment opportunities. Knowledge and Networks therefore reflect the human and social capital conceptualisations from existing studies and formed a first order construct. The second stage of the study and employment of CFA identified this construct as valid and reliable as detailed in Chapter 5. The following hypotheses were developed for analysis through the use of SEM:

H_{1a} Capital – Knowledge and Networks has a positive relationship with the second order construct Capital

H_{1c} Capital –has a positive relationship with Employability.

H_{1a} considers the relationship between Knowledge and Networks as a first order construct with Capital as a second order construct. H_{1c} considers the relationship between Capital and Employability. The original SEM Model identified a positive relationship for both hypotheses, however, only hypothesis H_{1a} was significant. This suggests acceptance of H_{1a} and rejection of H_{1c}.

Another first order construct within the Capital domain related to items relevant to Tomlinson's (2017) theories on identity capital. EFA closely associated a number of items linked to learner ambition and this therefore influenced the naming of the next first order construct. Items relating to Ambition focus on questions about career aspirations. CFA identified this construct as being valid and reliable and it was therefore included in the SEM model to test the following hypothesis:

H_{1b} Capital – Ambition has a positive relationship with the second order construct Capital

The results of SEM Model 1 identified both a positive and significant relationship between Ambition as a first order construct and the second order construct Capital. Hypothesis H_{1b} is therefore accepted. However, as identified above, hypothesis H_{1c} is

rejected and therefore whilst both Ambition and Knowledge and Networks have a positive and significant relationship with Capital as the second order construct, Capital has a positive but non-significant relationship with Employability. The items within both of the first order constructs are clearly significant in terms of their relationship with employability as identified in both existing theoretical conceptualisations such as the work of Tomlinson (2017) and Williams *et al.* (2016) although this skews SEM Model 1 due to the high correlation between these items and the construct Career Management.

It is evident when reviewing antecedents of employability that blurred boundaries exist between the conceptualisations of Capital and Career management such as the use of the terms skills and attributes and identity. Whereas Williams *et al.* (2016) focus on this construct within career management and self-management, Tomlinson (2017) links it to graduate capital alongside human, social, psychological and cultural capital. Interestingly, in the concluding remarks in the study by Williams *et al.* (2016 p. 22), recommendations are made to “*combine theorising around capital, signalling, identity, career management and labour market*” in order to gain a better understanding of employability. With this in mind, Stage 2 of the study explored this further through examining the relationship between the first order constructs of Capital with the second order construct Career Management. In order to test if the two first order constructs have a positive and significant relationship with Career Management as a second order construct, modification of SEM Model 1 and development of SEM Model 2 enabled further examination of the two original capital factors. The subsequent findings identified a good model fit along with both a positive and significant relationship with Career Management. Furthermore, Career Management was also determined in SEM Model 2 to have a positive and significant relationship with Employability.

Based on the support of theory and analysis of the SEM Model 2 and findings from CFA, it is evident that the Knowledge and Networks and Ambition are closely aligned with the constructs of Confidence, Determination and Commitment. All of the first order constructs presented in SEM Model 2 therefore have a positive and significant relationship with Career Management as a second order construct, which in turn has a positive and significant relationship with Employability. This therefore

suggests that the part-time students associate both the theories of capital and career management as one overarching concept as opposed to the two separate dimensions. This therefore relates to Williams *et al.*'s (2016, p. 898) suggestion that only through a “*plurality of factors can we truly further the conceptualisation of employability and therefore successfully inform the design and measurement of employability development interventions*”. This study therefore combines the significant determinants identified within both Stages 1 and 2 of the data collection and provides an empirically tested measurement tool and model which can be utilised to inform the development of the curriculum and incorporation of employability interventions for part-time programmes.

The combining of the five first order constructs posed a question over the naming of the second order construct particularly when reviewing the items with the constructs, Ambition, Knowledge and Networks, Confidence, Determination and Commitment. The label Career Enhancement describes better the key determining factors in the conceptualisations of employability for part-time students. Firstly, a part-time student acknowledges Ambition as a key determining factor associated with employability based on the identification of a career that is inspiring and meaningful and relates to self in terms of satisfaction. The questions relating to this construct largely relate to Tomlinson's (2017) reference to identity capital in terms of career insight. Human and social capital theories form the basis of the construct Knowledge and Networks with questions relating to an awareness of professional networks, and subject specific skills featuring within this construct. Such concepts again relate to Tomlinson (2017) and his interpretations of human and social capital. A part-time student therefore seeks career enhancement but requires ambition to seek opportunities along with the relevant skills and knowledge whilst also drawing on their networks to support them within their chosen career. Career enhancement therefore encompasses these concepts and contributes to their career readiness through developing opportunities to develop an individual's knowledge and networks. To enhance and / or prepare for their career, a part-time student cannot solely rely on knowledge and networks but also requires vision and ambition to succeed. This also aligns closely with the three first order factors identified in the EFA and components relating to career management.

Bridgstock (2009) developed the Career Management model, which considers self-management and career building skills. Williams *et al.* (2016) conceptualise Career Management to include both signal and self-management. Stage 1 of the study and employment of EFA explored these concepts further through examining questions relating to career management, the findings of which identified three factors which when analysed, aligned with three key terms, Determination, Confidence and Commitment.

The construct Confidence is based on variables linked to a learner's association with questions relating to being able to explain their value to a potential employer and being able to structure information to meet the requirements of the audience such as the interview process. This construct also relates to an individual's ability to know how to identify careers which are of interest to them. This factor is therefore closely associated with the Bridgstock (2009) Career Management model particularly in terms of career building skills whilst also linking to signal management as identified by Williams *et al.* (2016). Further analysis employing CFA identified Confidence as a valid and reliable factor for further analysis in Stage 2 of the study. Prior to the development of SEM Model 2, the earlier SEM Model 1 identified both a positive and significant relationship between Confidence as a first order construct and Career Management as a second order construct. The modification of the model to create SEM Model 2 identified the hypothesis:

H_{1c} Confidence has a positive relationship with the second order construct Career Enhancement

The results of SEM Model 2 identified both a positive and significant relationship between Confidence as a first order construct and the second order construct Career Enhancement. Hypothesis H_{1c} is therefore accepted.

The construct Determination is associated with the consideration of variables relating to a student's relationship with their determination to succeed whilst also knowing what they want to do on completion of their degree. This links to Bridgstock's (2009, p. 37) reference to self-management, particularly in terms of "*appraisal of themselves in terms of values, abilities, interests and goal*" which relates to career motivations.

The relationship between Determination as a first order factor and Career Management as a second order factor was confirmed in Stage 2 Model 1 and a significant and positive relationship was identified and the hypothesis could be accepted. As detailed above, SEM Model 1 was however modified due to the non-significant relationship between Capital and Employability, the outcome of which was the development of SEM Model 2 and hypothesis H_{1d}:

H_{1d} Determination has a positive relationship with the second order construct Career Enhancement

The results of SEM Model 2 subsequently identified both a positive and significant relationship between Determination as a first order construct and the second order construct Career Enhancement. Hypothesis H_{1d} is therefore accepted. It was further noted that out of the five first order constructs, the factor associated with Determination had the highest factor loading overall, indicating this has the most positive relationship with the second order construct, Career Enhancement.

The final first order construct to be considered is Commitment. Variables associated with this component are closely associated with the drive to succeed in terms of both developing skills and knowledge along with the willingness to put in additional effort to succeed. This again relates to Bridgstock's (2006) Career Management model particularly in terms of skills development but arguably the reference to skills and knowledge also links with human capital theories (Knight and Yorke, 2003). The close association between constructs associated with capital and career management further supports the modification of SEM Model 1 to link all five first-order constructs with Career Enhancement as a second order construct. Testing of SEM Model 1 identified a positive and significant relationship between Commitment and Career Management. The subsequent testing of H_{1e} within SEM 2 based on the following hypothesis also yielded a positive and significant relationship.

H_{1e} Commitment has a positive relationship with the second order construct Career Enhancement

SEM Model 2 therefore confirms that positive and significant relationships exist between the five first order constructs and the second order construct Career Enhancement.

The final hypothesis to be tested relates to the relationship between Career Enhancement and Employability:

H_{2a} Career Enhancement has a positive relationship with Employability.

The results of SEM confirmed that both a positive and significant relationship exists between Career Enhancement as a first order construct and Employability as the dependent variable. Based on analysis of the paths in SEM model 2 the research objective identified at the beginning can be further analysed through the identification of a model of employability for part-time students along with a validated measurement tool.

6.5 Design and Development of an Employability Model (RO6)

Based on a review of the literature surrounding the concept of employability and the subsequent primary data collection and analysis undertaken through the employment of EFA and CFA, a model of employability is proposed and presented in Figure 6.1. The model has been empirically tested through the use of SEM and testing of the hypotheses as determined in Stage 2 of the data findings and collection. As illustrated in the model, five factors impact on career enhancement and this in turn impacts on the conceptualisation of employability. Therefore, part-time students who are considering HE to develop their employability either in terms of entering the labour market, career progression within their existing role, change of career or job security can utilise the model presented in Figure 6.1.

The measurement tool developed in conjunction with the creation of the Career Enhancement Model of Employability (CEME) can also be utilised as a self-assessment tool which provides a contribution to practice and is expanded on further within section 6.7 below.

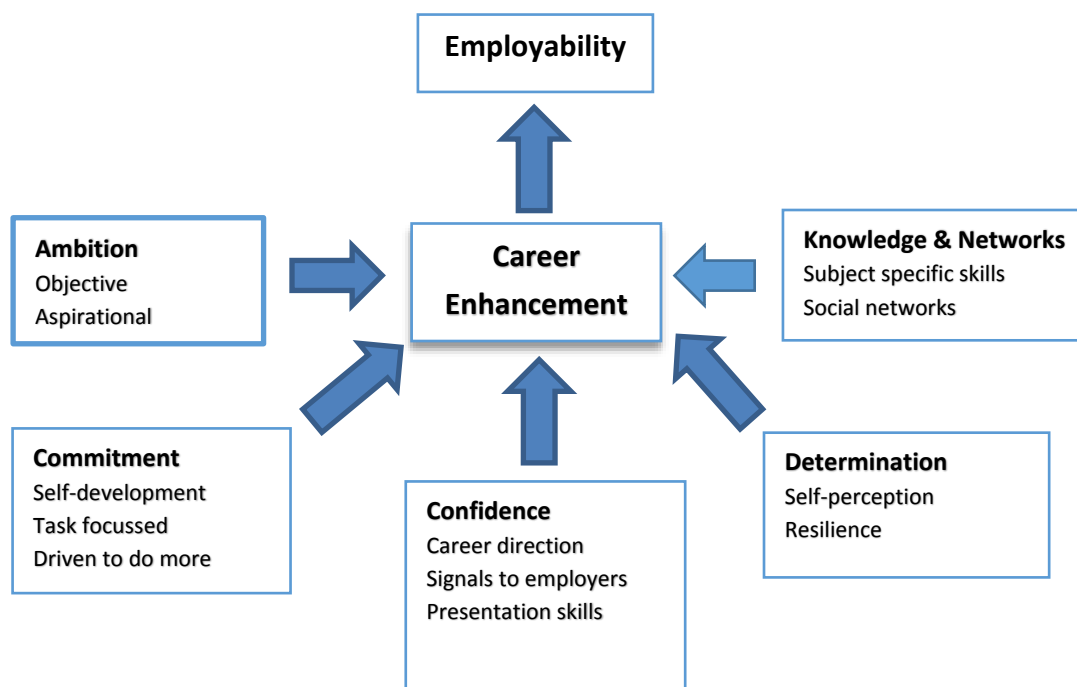


Figure 6.1 Career Enhancement Model of Employability (CEME) for Part-time Students

6.6 Contribution to Knowledge

The first significant contribution to knowledge is the creation of the Career Enhancement Model of Employability for Part-time Students (CEME) as presented in Figure 6.1. The model provides a valuable tool for students and academics within HE to consider which has been largely under researched within existing pedagogical studies. As identified in the earlier chapters and review of literature, whilst there is a plethora of studies which consider graduate employability, the primary focus is on full-time students. This study therefore offers a methodological contribution in the form of the study instrument and the associated items and scales. In addition, the study offers the further contribution of a model which has been tested empirically.

The Career Enhancement Model (CEME) provides an opportunity for learners to consider their orientation within an emphasis on their previous experience, current situation and future goals. This in part relates to the earlier work of Holmes (2013), Delaney and Farren (2016) and more recently Okay-Somerville and Scholarios (2017) who discuss the merits and disadvantages of a *'positional'*, *'possessional'* or *'process'* approach as students progress from university to a work environment. The

'position' here relates to the acquisition of skills whilst *'possessional'* is linked to social background and education which have its disadvantages in terms of “*societal stratification*” (Okay-Somerville, 2017, p. 276). The *'process'* aligns with how graduates view and manage their “*university-to-work transitions*” (Okay-Somerville, 2017, p. 276). Whilst the whole employability debate considers these various approaches and its associated advantages and disadvantages, the aim of this thesis is not to determine the best approach. Instead the study attempts to consider the numerous conceptualisations to establish which elements have the potential to enhance the employability of part-time students. Therefore, whilst Holmes (2013) is critical of a possessional skills-based approach, the study has found that part-time students acknowledge this antecedent as being relevant to their career enhancement. Hence, whilst they might potentially possess some soft and hard skills, the link to subject specific skills is still a feature, the level and requirement of which will obviously differ depending on the motivations of the individual. Some students potentially look to develop new subject specific skills whereas others will seek to build on their skills to perhaps develop in their existing role or a new career. Linked to this is positional in terms of social capital which again, part-time students acknowledge as being significant. Interestingly, during the application of EFA a close association between human and social capital was observed, the outcome of which was the construct Knowledge and Networks. Therefore, the findings from the primary research linked the two forms of capital but through the process of CFA and SEM it was found that as opposed to being considered within a positional and possessional dimension, it was actually found to be more significantly and positively related to a process perspective more closely associated with career management.

Ambition also relates to a process perspective particularly in terms of HE and work transition. The variables associated with Ambition are closely associated with the work of Tomlinson (2017) and reference to identity capital. This again links to the process perspective, which Okay-Somerville and Scholarios (2017, p. 276) state has a “*greater applied relevance for graduates and those involved in enhancing graduate employability*”. The two constructs originally identified within the dimension of capital from the systematic literature review undertaken by Williams *et al.* (2016) therefore contribute to the career preparedness of part-time students but are more closely associated with the career management as opposed to capital.

The identification of Commitment, Determination and Confidence as determined through EFA within the construct of Career Management also align to a process perspective due to the link between HE and employment trajectories. The individual student must embark on their studies with appropriate levels of commitment and determination, which can be reinforced through their learning experiences. There can, through appropriate curriculum intervention be activities that centre on developing the confidence of the learner, not only to study but on advancing within their chosen career area.

The development of the measurement tool from both Stages 1 and 2 of the primary data findings and analysis has been further utilised to create a self-assessment questionnaire which can be utilised by students, career services within HE, employers and academics to identify development needs and this could help inform a student's decision of how and what to study. A copy of the self-assessment questionnaire is presented in Appendix 10 and provides a contribution to practice which will be explored further in Section 6.7. CEME is therefore an empirically tested model, which utilises a number of conceptualisations within the employability forum and thereby adds a further contribution to the subject area. The model has two key functions. At a conceptual level a part-time student can evaluate the five factors of Ambition, Commitment, Confidence, Determination and Knowledge and Networks and reflect on how they can utilise these constructs to enhance their career and improve and / or develop their potential employability. The second function relates to the validated measurement tool used in the development of this model which can be used as a self-reflection questionnaire for students to utilise when entering HE to ascertain potential areas for development or as a personal reflective tool on completion of studying. The contribution of this model both in terms of professional practice and knowledge are therefore evident and will be explored further in the following sections.

6.7 Recommendations for Practice

In accordance with the professional practice focus of a DBA, this thesis offers a number of recommendations to improve the experience for part-time students aligned to their career enhancement and employability. As opposed to absorbing part-time

students within the curriculum design and pedagogical practices developed primarily for full-time students, the findings of this study highlight opportunities for all stakeholders to gain a better understanding of the relationship between part-time students and graduate employability. Figure 6.2 summarises the recommendations for practice and the implications for stakeholders and these will be expanded on further in the sections below.

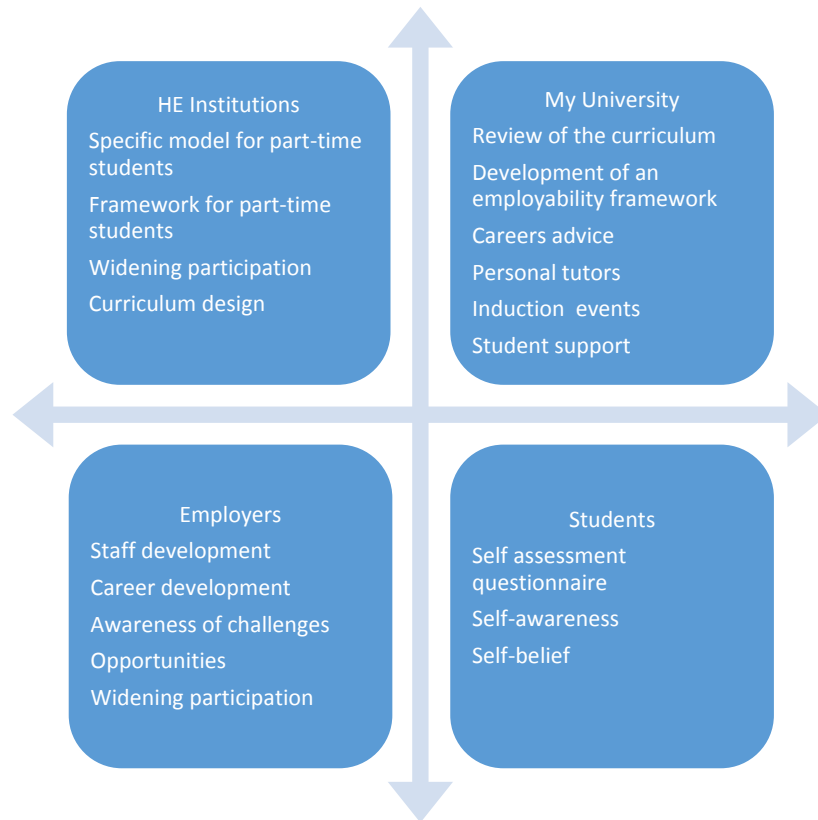


Figure 6.2 Recommendations for Professional Practice

6.7.1 Implications for Higher Education

HEIs acknowledge that not all students are in a position to engage with HE on a full-time basis and as such offer different modes of study. Part-time programmes can be delivered on either a taught, blended or distance learning basis. More recently, the introduction of degree apprenticeships also offers another opportunity to study whilst working. As identified by Kember (2001), differences in the motivations and orientations to study can be observed between full and part-time students. This therefore provides more complexity to learning and teaching practices to ensure that the design of the curriculum meets the expectations of the various stakeholders and in particular the part-time learner.

Employability for part-time learners is more than just the acquisition of skills and knowledge. A part-time student may already possess the skills and knowledge within their job but cannot progress in their career without a formal qualification such as a degree. Other part-time students may not possess the required skills and knowledge and may be engaging in HE to develop such attributes with the aim of securing employment. Hence, the motivations to study can vary amongst part-time students so HEIs need to respond to this diversity and design and develop a curriculum to reflect this.

Part-time modes of study contribute to the provision of both social mobility and widening participation to HE which also contribute to the UK economy and increased global competitiveness (Bennion *et al.* 2011). Harvey (2001) identifies social class, ethnicity, age and gender as potential mediating factors in terms of employability. Whilst HE provides WP opportunities which can include the provision of part-time programmes, the initial access to education is just the first stage of improving social mobility. WP extends further and is linked to improving job security and improved financial security and improvement to physical and mental well-being. This reinforces the overall value of part-time study and further demonstrates the need for HEIs to develop a curriculum and provide opportunities to consider employability not just in terms of the more traditional full-time students

The implications for HE providers are therefore the opportunities to review both pedagogical practices for part-time students along with ensuring support systems exist to enhance the academic journey of part-time students to achieve their goals. Utilising the Career Enhancement Model of Employability, HEIs could utilise the five factors to help inform and design programmes as well as the curriculum and support services to facilitate the learning of part-time students. In terms of designing programmes and the curriculum, it should be recognised that the orientations amongst part-time learners can be quite diverse (Kember *et al.* 2001). This links to the construct Ambition and recognition that career paths differ and as such employability is not just about the initial acquisition of a job but could instead link to career progression. The model therefore helps raise awareness of the diversity amongst part-time learners and the needs to establish opportunities to develop knowledge and

networks along with developing the confidence amongst the learners. This also links to support services such as careers advice, to ensure that part-time students make use of such services. The self-assessment tool developed from the survey questionnaire provides an opportunity for learners to work with both academics and support teams to identify areas for development. This builds on a similar self-assessment tool offered for full-time students as presented by Dacre Pool and Sewell (2007).

Academics may be unaware of the potential challenges a part-time student faces when embarking on a part-time programme of study, particularly in terms of juggling work commitments alongside part-time study and perhaps caring responsibilities. As previously suggested by Callender (2011), part-time students are quite diverse. Academics who have neither studied part-time and /or have limited experience of teaching on a part-time programme of study may therefore lack awareness of the challenges part-time students face. This study therefore contributes to developing a greater understanding of the diverse nature of part-time students and emphasises the need to ensure that part-time students are not the same as full-time students, particularly in terms of the design of the curriculum. The implication of this study for academics therefore provides an opportunity to rethink what employability means for part-time students and perhaps dispense the myth that it does not have the same relevance as it does for full-time students. Not all part-time students are employed and others will be engaging with HE to change career, as such, there needs to be a greater understanding and awareness of the needs of part-time students in terms of their career enhancement.

At a more individual level, the study also has implications for academics seeking to engage in further study such as a part-time Doctoral programme. The model demonstrates the key dimensions which will contribute to and influence their learning. An example of this is knowledge and networks, although an academic will demonstrate subject specific skills they might be lacking in other skills such as research skills. The use of their existing network could have a positive influence on access to participants and respondents and the model therefore provides a useful framework to support a part-time student in recognising what strengths they can utilise along with areas for development.

6.7.2 Implications for Northumbria University

This thesis has a number of recommendations and potential implications for Northumbria University. In 2016/17 the Programme Framework for Northumbria Awards (PFNA) was implemented and embedding employability for all students formed one of four pillars within the framework. The criteria for all programmes were to ensure that all “*Northumbria graduates are fully prepared for employment or future study at their point of graduation*” (one.northumbria.ac.uk) and linked graduate employability to the curriculum. As identified in Chapter 2, part-time students are often incorporated within strategies designed for full-time students and whilst part-time students would have been considered in the PFNA implementation, there is a lack of a clear framework to support their student journey. The findings from this can therefore contribute to the development of an employability framework, designed specifically to consider the constructs which relate most to their career enhancement. An implication of this is that a review of the curriculum for part-time programmes may be necessary to determine how best to meet the diverse nature of such learners and how best to embed the five significant and positive factors associated with their employability.

Northumbria offer a range of part-time programmes including degree apprenticeships, distance learning and taught undergraduate and postgraduate modes of study and the model could therefore be utilised and adopted across the range of programmes to help support and develop a better understanding of the diverse nature of such learners.

A further implication of these findings for Northumbria University is to ensure student support such as student well-being and student progress recognise the different challenges a part-time student can face. A large percentage of students are employed on a full-time basis whilst also engaging on a part-time taught or distance learning programme or degree apprenticeship. Whilst Northumbria University offers student support for all students regardless of mode of study, this thesis demonstrates the diverse nature of part-time students and as such, their individual needs could differ significantly from full-time. The construct Determination in particular links to self-perception and resilience, which align with both curriculum and appropriate student support. This can have implications on the teaching teams including programme leaders and module tutors along with the allocation of personal tutors to

support these students as they negotiate their academic journey. The level of support between programmes will obviously differ depending on the subject area and mode of study. For example, on a Chartered Manager degree apprenticeship, each student is allocated an academic coach to support their learning but this is not possible or viable for students on a distance-learning programme of study. An infrastructure to support all students regardless of mode of study therefore requires further consideration to ensure both academic and professional support is available. This includes an induction event for each programme, delivered both in a traditional taught format, or digitally for distance learning programmes. The induction could introduce the concept of career enhancement and employability and encourage students to complete the self-assessment as a tool to support their learning. This idea is similar to the CareerEDGE model and framework developed by Dacre Pool and Sewell (2007). Some of the questions with the Career Enhancement Model have incorporated the scales sets for the self-belief questionnaire although at the exploratory analysis stage a number of items from this scale were not found to be as relevant for part-time students and were omitted.

Careers support is another dimension to consider. Whilst a careers service is provided and offered at Northumbria University what specific provisions exist for part-time student? Although a number of students will currently be employed, their motivation to engage with HE might be linked to identifying or pursuing a new career or career development. This thesis therefore raises a further implication for both the Careers service at Northumbria University and other HEIs. The questionnaire designed for Stage 2 of the data collection and as presented in appendix 10, offers a self-assessment questionnaire which part-time students can utilise to benchmark themselves against and help identify areas for development and part of their career enhancement. The next stage of this research is to incorporate the self-assessment tool for students joining a part-time programme of study at Northumbria University. The University has recently undergone a restructure of professional support services which includes the creation of Graduate Futures. Discussions have taken place with the Head of Careers to look at piloting the self-assessment questionnaire as part of a career ready initiative as part-time students enrol onto their programme. The aim is to distribute the questionnaire in the next academic year to part-time students enrolling on Business related programmes in the Faculty of Business and Law.

6.7.3 Implications for Employers

This study has numerous implications for both current and prospective employers through recognising the contribution part-time students can make to their respective organisations. Employability is linked to the ability of an organisation to maintain competitive advantage (Van der Heijde and Van der Heijden, 2006) and part-time study contributes to economic growth (Callendar and Little, 2015).

Although not particularly aimed at part-time students, research by Cai (2013) acknowledges that graduates can fail to meet the expectations of employers. This criticism could equally relate to both full and part-time students. Whilst the debate of human capital theories and labour market outcomes is likely to continue, HEIs still need to consider the perceptions of employers. This is becoming increasingly relevant given the introduction of degree apprenticeships and the investment by organisations to develop both new and existing employees.

The design of the curriculum by HEIs is therefore an important feature and could be a contributory influencing factor to meet the expectations of employers. Through gaining a better understanding of the dimensions of employability for part-time students, HEIs can respond and facilitate opportunities to develop a curriculum, which encompasses the five factors in the career enhancement model. Opportunities to facilitate not just the positional and possessional aspects of an individual but also the process to support their career enhancement can be identified from both the model and toolkit (Appendix 10). In terms of degree apprenticeships, an employer can influence the design of such programmes and again the model might be a useful tool in supporting the design of these programmes, particularly in terms of gaining a better understanding of the key factors for career readiness to meet the expectations of all stakeholders.

The model will also assist employers to develop a greater understanding of the challenges a part-time student can face. This relates to both current employees along with new prospective employees who are engaging and / or considering a part-time programme of study.

6.7.4 Implications for Students

The claimed benefits of part-time study, particularly for mature students, are related to “*self-fulfilment, health, family functioning, civic participation and social attitudes*” (Swain and Hammond, 2011, p. 592) and for some students, full-time education is not an option (Butcher and Rose-Adams, 2015). As recognised however by Williams and Kane (2010), part-time students can feel marginalised compared with full-time students. The implications of this study therefore offer an insight into some of the challenges a part-time student can face from the perspective that there is a lack of consideration of career enhancement within existing employability frameworks for such learners. The implication of this study is therefore to bridge this gap and offer a model to support the curriculum design and development for part-time modes of study.

Although earlier models of employability such as CareerEDGE (Dacre Pool and Sewell 2014) and USEM (Knight and York, 2003) have some relevance for part-time students and variables from their empirical studies are incorporated, the proposed Career Enhancement Model of Employability has been developed from a large sample of part-time students to reflect the most significant factors within existing conceptualisations. The earlier models do not identify if part-time students were included within their development whereas the model identified within this thesis has been solely based on the contributions of such learners. This has significant implications for part-time students as it has been designed and tested with the end user in mind in order to make a positive contribution to the development of part-time programmes. The difficulty in determining a model of employability for part-time learners links to the diverse nature of such students, where some will be employed and seeking career progression, whereas others may be seeking an alternative career or even looking to gain entry to the labour market but are unable to engage in a full-time programme of study.

The CEME model has been developed from a representative sample of part-time students as demonstrated in Tables 4.2 and 5.2. Harvey (2001) recognises age as a potential mediating factor in terms of access to HE. The demographics for both tables demonstrate that the majority of part-time students are in the age range of 25-34 which suggests the respondents are mature students. This links to the work of

Yorke (2006) who identifies that employability is not just related to new graduates but extends to the working life of an employee. The demographics in terms of age groups therefore demonstrate that mature students are engaging in some form of part-time study either at undergraduate or postgraduate level in order to enhance their employability.

The data in tables 4.2 and 5.2 demonstrate a slightly higher response rate from post-graduate students which could indicate that some of the learners may already possess an undergraduate degree but are seeking further qualifications. This could be for career enhancement or to change career but in some instances could also relate to students looking to gain entry to the labour market. The data in both tables suggest that the majority of the respondents are currently employed full-time although it was also noted that a small percentage of the respondents were unemployed and actively seeking work. This links to the earlier work of Swain and Hammond (2011) who acknowledge both extrinsic and intrinsic motivations for studying. In terms of extrinsic motivations this relates to both those employed or unemployed particularly for those engaging in studying to pursue a new job or career change. This could relate to gaining specific skills though gaining a recognised qualification which supports their role within the workplace. The aim of the CEME is to appeal to all part-time students regardless of their motivation to study. Hence, it should be equally relevant for someone looking to gain initial employment as well as someone looking to progress within their current role.

To test the CEME further and in conjunction with the Graduate Futures team at Northumbria University, part-time students will be afforded the opportunity to complete the self-analysis questionnaire (Appendix 10). This will also enable such learners to identify their individual specific needs and areas of strength. For example, a part-time student may be determined to secure a new job but may lack the subject specific skills and networks to secure employment. In this instance, the student could rate themselves at the start of their studies and recognise that they have high scores in terms of commitment and determination but need to develop subject specific skills, networks and confidence to enhance their career. Likewise, a part-time student might rate themselves highly in terms of skills but lack ambition and self-belief. The questionnaire is a useful tool, which part-time students can complete independently or

through discussion with their tutors to determine their learning goals and purpose for study. The model therefore provides a contribution to practice for part-time students by providing an informative platform for self-assessment. Based on the findings of the evaluation, it can be used to identify areas of strength and areas for further development to support their career enhancement on an individual basis.

6.8 Strengths and Limitations of the Study

A strength of this study is the adoption of a two-staged approach to the data collection and analysis. The conceptual model presented at the end of Chapter 4 could have concluded the study, with both CFA and SEM identified as an area for further study. However, to ensure the study significantly contributed to both knowledge and professional practice, the findings from the EFA in Stage 1 were utilised to extend the study further, which comprised a confirmatory position and empirical testing of a model. This is a further strength as there are limited empirically tested models within the antecedents of employability, particularly in terms of part-time students.

A strength of this study is therefore the contribution of a model, which considers a gap in existing conceptualisations. Linked to this, and a further strength of the study, is the large sample and number of respondents who were involved in the study. The study could have focussed on just part-time students at Northumbria University and ease of access to a sample would have been easier, as opposed to approaching a number of other institutions to take part. This does however link to a potential limitation of the study in that just three universities took part although enquiries were made with other HE providers, including the Open University. However, as indicated during discussions with Birkbeck University, students can suffer survey fatigue, a consequence of which limits the number of surveys distributed. Nevertheless, a good demographic and large sample for both Stage 1 and 2 ensured the provision of a good data set to facilitate the EFA and CFA testing and analysis. The outcome of the primary research is an empirically tested model for use in future studies and research.

A further strength of this study is the development of a study tool, which is specific for part-time students (Appendix 10). As detailed in the contribution to professional practice sections above, this self-assessment tool can be utilised by both students and the HEI to benchmark individual strengths and weaknesses and areas for

development. The tool provides an opportunity to raise awareness of the challenges a part-time student can face and the core factors of the ability to have ambition, commitment, determination and confidence combined with developing and utilising knowledge and networks for career enhancement.

As with any study, there are some limitations. Harvey (2001) identifies social class and ethnicity as potential mediating factors to HE. The data obtained for the purposes of demographics did not identify either of these factors and this is therefore a potential limitation to understanding how many part-time students could be considered BAME students and how many are engaging with part-time study as part of a WP opportunity. The contribution of the OU could have provided a different demographic as well as students who may attend a Russell Group university. The main limitation of this study therefore relates to the number of respondents who are predominantly from a North East post 1992 university. It would therefore be beneficial to extend the study further and utilise the questionnaire to explore the findings further with other institutions such as the OU. This would include expanding the study and analysing the data from the demographics and include questions relating to ethnicity.

A further limitation of the study relates to the self –assessment tool. Whilst this is an outcome of the study as a result of Stage 2 of the study and the questions which were utilised in the creation of the five dimensions of Ambition, Knowledge and Networks, Commitment, Confidence and Determination, the questionnaire has not been tried and tested in terms of a self-assessment exercise. It would have been beneficial to extend this study further and obtain qualitative feedback on utilising the self-assessment questionnaire with new part-time students enrolling on either postgraduate or undergraduate programmes. This is however, an area for further research and will be explored further.

6.9 Recommendations for Future research

This study offers opportunities for future research to be undertaken. Firstly, the measurement tool and questionnaire could be distributed to other institutions to expand the scope of the study and this could include other countries who also offer

part-time programmes of study such as Australia and EU countries. A comparable study could then be undertaken to determine any differences which may exist.

Whilst the study has been designed with part-time learners at the forefront, there is potential for the model to be utilised by full-time students. Extant literature largely focuses on the two domains of career management and capital whereas the findings of this study acknowledges the blurred boundaries between the two and proposes the dimension of career enhancement. This is therefore a further area worthy of exploring to determine how full-time students perceive this conceptualisation which would again, provide an opportunity to undertake a comparable study to identify any similarities and differences between the two distinct groups.

6.10 Personal Reflection

When evaluating the Career Enhancement Model, I can personally identify with the five constructs. I embarked on the journey of undertaking a professional doctorate with the aim of enhancing my own career and employability. The first dimension in the model, Knowledge and Networks relates to existing skills and relationships, which I drew on to design and develop this study but I also acquired new skills such as learning quantitative research methods and analysis. Prior to starting this study, I had not undertaken any quantitative research or statistical analysis. This thesis has therefore contributed to my development as an academic and will support me further within my role. Through engaging with this DBA, I have developed a new skills set which I will be able to continue to build on and develop within my role. This includes learning how to design and construct an online questionnaire along with learning how to undertake both EFA and CFA/SEM. I drew on existing and new networks to gain access to respondents to take part in the study and this therefore links the dimension of Knowledge and Expertise to my own experience.

I needed ambition to fulfil this study, I had to find inspiration from others whilst also being aspirational to succeed for my own self-fulfilment. Commitment is also essential when embarking on a part-time programme, studying part-time is not to be taken lightly and at times, it has been difficult to fully commit to this thesis due to both work and personal commitments. Life goes on when studying part-time and as a parent of two children, family life takes precedence over studying. This was evident

in the literature surrounding part-time students and the balancing act many parents find themselves in when trying to juggle work, family and study. Commitment and ambition to reach the end goal were therefore critical to achieve completion of this study.

Self-doubt is, however, ever present when I study and I lack confidence in my written work and worry how others will perceive what I am doing. A colleague heard me speak at recent research event and provided feedback after to say *“I needed to have more belief in myself”*. This can be difficult for a part-time student who feels like an imposter at times. I essentially fall within the realm of widening participation and left school at 16 with just my GCSEs. I was the first and only generation in my family to go to University which subsequently enhanced my career and led me down an exciting and fulfilling career path. However, determination to succeed has been at the very core of my studies, particularly as a part-time student.

The journey to complete the DBA has therefore contributed to my sense of well-being and links to my continuing professional development as a career in education shifts. I joined Northumbria University in 2006 as a senior lecturer in Building Surveying. My focus was on learning and teaching and transferring my knowledge and experience from 10 years in industry to students on an undergraduate degree. The role however requires research informed teaching and my career is an ongoing transformation from being a surveyor to an academic to early career researcher to completing a professional doctorate. In hindsight, a combination of ambition, commitment, confidence, determination and knowledge and networks have been the contributory factors to my development.

6.11 Chapter Summary

This chapter draws the thesis to a close having explored the research objective:

Identify and empirically assess the antecedents of employability that enhance the employment and career readiness of part-time students

The chapter concludes with identification of how this study contributes to knowledge and provides recommendations for practice in accordance with the criteria for a

professional doctorate. The study strengthens support for part-time students to be considered within HE frameworks when developing employability strategies. Part-time students face many challenges and have differing motivations and orientations to study. It is evident from this study that elements of the current conceptualisations of employability have relevance for part-time students but these need to be utilised and adapted to support such learners to enhance their employability and current or future careers. Through the application of both EFA and CFA/SEM, a model has been developed and empirically tested to support part-time students and inform the various stakeholders of the key determinants of career readiness for such learners.

The outcome of this thesis has therefore been the development of the Career Enhancement Model of Employability which is intended to support part-time students as they embark on their academic journey. The self-assessment questionnaire offers an opportunity for part-time students to assess their current status and provide an insight into areas for development. This ultimately links to both their intrinsic and extrinsic motivations to study which largely relates to their individual ambitions to study. For example, if they identify a low score for the question, *“I have a future career direction that would be meaningful for me”* this would suggest that the learner is engaging with HE to change career. Gaining an understanding of how the learner rates their current Knowledge and Networks will help identify how they build and expand on both their human and social capital. If a low score is given in terms of the question relating to social capital *“I am able to build wide and effective networks of contacts to achieve my goals”* this would help the student to identify opportunities to expand their networks which could include looking for opportunities via social media platforms such as LinkedIn. Factors relating to Determination, Commitment and Confidence will again allow the respondent to self-assess areas of strength and areas for further development. The self-assessment tool therefore provides a starting point for part-time students to engage with when first entering HE and could be completed in conjunction with the student’s employer, personal tutor or careers advisor. The assessment tool could be revisited both during and at the end of study to review progress and the further development of a personal development plan. At an individual level, it therefore provides a useful tool to self-assess and identify strengths and perceived weaknesses. The toolkit therefore follows a similar format to the questionnaire developed by Dacre Pool and Sewell (2007) but builds on this idea

further and presents a questionnaire which has been informed and developed from data collected from part-time students.

At an institutional level, the CEME therefore offers an alternative model to USEM (Knight and Yorke, 2003); CareerEDGE (Dacre Pool and Sewell, 2007) and Career Management (Bridgstock, 2009) models. It addresses a gap in existing research and supports the development of the curriculum to consider part-time students and the incorporation of relevant employability strategies to support their learning and development.

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LIST OF APPENDICES

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Appendix 1 – Ethics Approval and Consent Forms

Research Organisational Consent Forms

From: [ethicssupport](#)
To: [Dawn Whitton](#)
Cc: [ethicssupport](#)
Subject: Amendment to ethics application
Date: 07 March 2018 10:28:10
Attachments: [Faculty Organisation Informed Consent Form DW Rev Feb 2013.doc](#)
[image003.png](#)
[image006.png](#)

Dear Dawn

Further to your application to amend your original ethics application, I am pleased to inform you that your amendments have been approved. Please see comments from the reviewer (Mary Thomson, the Faculty Ethics Director):

“I am happy to accept Dawn’s amendment and have signed her request for organisational approval (please see attached). She will have to apply to the Ethics Directors for each Faculty if she wants permission to contact their students and staff. If she sends them an email stating that she has ethics approval and attaches the my signed form she shouldn’t have a problem”.

The ethics directors contact details can be found on our ethics and governance webpage here (click to expand the Contacts section): <https://www.northumbria.ac.uk/research/ethics-and-governance/>

If you have any queries please don’t hesitate to get in touch.

Kind regards
Sarah

Sarah Agnew
Research Support Administrator, Research and Innovation Services

Please note that my working days are Tuesday – Friday

T: +44 (0)191 227 3656
E: sarah.agnew@northumbria.ac.uk

Research Organisational Consent Forms



Faculty of Business and Law

Student Research Ethical Issues Form

Student Name:	Dawn Whitton
Programme of Study	Doctorate in Business Administration
Title of Research Project:	An investigation into the context specific conceptualisations of graduate employability and their relevance for part-time students in higher education
Start Date of Research Project:	October 2014
Supervisor	Dr Andrew Robson

	Comments
Brief description of the proposed research methods including (if relevant) how human participants will be selected and involved.	<p>The research will involve part-time under-graduate and post-graduate students. The sample will comprise of students from Northumbria and a sample of other HEI's who offer part-time modes of study.</p> <p>Primary data will be collected from a survey which will take the form of an on-line questionnaire. The HEI's taking part in the study will distribute the survey via email to their respective students but the responses will be returned to the researcher via the on-line questionnaire. The students will be selected based on the mode and programme of study and will be agreed with other HEI's before distribution. The aim is to distribute in the region of 4000 questionnaires. A pilot study will be undertaken at each institution involved in the study and this will comprise of a small number of students completing the questionnaire and attending a small focus groups to obtain feedback. Based on the pilot and discussions, the questionnaire will be amended and distributed accordingly.</p> <p>The aim of the data collection and primary research is to determine the perceptions of part-time students and identify how they view the antecedents of employability and investigate the relevance of the existing models and frameworks.</p>

<p>How will informed consent of research participants be acquired?</p> <p>(If appropriate attach draft informed consent form)</p>	<p>The participants will be briefed about the research at the start of the questionnaire and in the email link. The participants will be advised that by continuing with the completion of the questionnaire, they are providing consent for their responses to be included with the research. The students will be informed that their details will be kept anonymous and that they can withdraw from completing the questionnaire at any stage.</p>
<p>Will the research involve an organization(s)?</p> <p>(If appropriate attach draft organisational consent form)</p>	<p>The students will be part-time learners studying either under-grad or post-graduate programmes of study at Northumbria University, and other HE'I offering part-time programmes. The rationale to include other institutions is to ensure sample sufficiency.</p> <p>An organisational consent form will be obtained from each Institution prior to commencing with the primary data collection.</p>
<p>How will research data be collected, securely stored and anonymity protected (where this is required)</p>	<p>All students will remain anonymous due to the sensitive nature of the information which could be gathered. Each participant will be given a unique code on the questionnaire and will not be required to provide their name. The responses will be secured via a password protected computer and it will not be possible to identify the participants.</p>
<p>How will data be destroyed after the end of the project? (Where data is not to be destroyed please give reasons)</p>	<p>On completion of the project, all data files will be deleted.</p>
<p>Any other ethical issues anticipated?</p>	<p>The organisations will all be anonymised if any of institutions involved in the study identify that they do not wish to be named. This will be determined when obtaining organisational consent.</p>

Student Signature (indicating that the research will be conducted in conformity with the above and agreeing that any significant change in the research project will be notified and a further "Project Amendment" Form submitted).

Date: 13/2/2018 **Student Signature:** *Dawn Whitton*

Supervisor:

I confirm that I have read this form and I believe the proposed research will not breach University policies.



RESEARCH ORGANISATION INFORMED CONSENT FORM

Faculty of Business and Law
University of Northumbria

Completion of this form is required whenever research is being undertaken by Business and Law staff or students within any organisation. This applies to research that is carried out on the premises, or is about an organisation, or members of that organisation or its customers, as specifically targeted as subjects of research.

The researcher must supply an explanation to inform the organisation of the purpose of the study, who is carrying out the study, and who will eventually have access to the results. In particular issues of anonymity and avenues of dissemination and publications of the findings should be brought to the organisations' attention.

Researcher's Name: Dawn Whitton
Student ID No: c355629

Researcher's Statement:

The research forms part of DBA programme of study, which investigates the context specific conceptualisations of employability and their relevance for part-time time students and their career preparedness. The study will involve part-time undergraduates and post-graduate students who are studying at Northumbria University, Teesside and Birkbeck. .

The intention is to obtain responses from a diverse group of part-time learners, covering a diverse range of ages and / or social-economic backgrounds. Eligibility to take part in the study will be justified within the research methodology.

The survey will be undertaken by emailing all eligible participants, requesting their assistance through the completion of an online questionnaire. The purpose of the study will be detailed in the email link and at the start of the questionnaire. Taking part in the research will be voluntary and the participants will be able to withdraw from completing the questionnaire at any time. The students will not be required to provide their name or contact details and all participants taking part in the study will remain anonymous.

As the primary data will be collected through an online questionnaire, the length of time, which the participants will need to allocate to the completion of the questionnaire, should not exceed 10-15 minutes. This is to maintain the interest of the participants whilst also being mindful that the students need to focus on their studies. The link to the survey will however, emphasise the importance of taking part in the research in terms of the value it contributes to their studies and emerging career through being able to reflect on where they are now and where they would like to be. To ensure the questionnaire is not ambiguous or too time consuming, a pilot study will be undertaken at each institution involved in the study prior to the final distribution of the questionnaire. A focus group meeting will be held with each pilot group to obtain verbal feedback on the structure and content of the survey.

The aim of the primary research is therefore to collect quantitative data to investigate the participant's perceptions of the conceptualisations of employability and existing models.

All data collection will be undertaken by myself, Dawn Whitton. The identity of the participants will be kept anonymous although it is intended to include the name of the

institutions involved in the study to be named. The findings will be disseminated internally within the University in terms of being listed on the research portal. I aim to disseminate the findings and recommendations at conferences such as SRHE and within journals to contribute to academic research. The HEI's who have agreed to provide access to their students are keen to undertake further research on completion of the thesis and work in collaboration to publish the findings further.

Any organisation manager or representative who is empowered to give consent may do so here:

Name: Professor Mark Simpson

Position/Title: Pro Vice-Chancellor (Learning & Teaching)

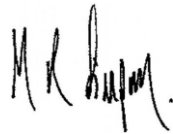
Organisation Name: Teesside University

Location: Middlesbrough

Anonymity must be offered to the organisation if it does not wish to be identified in the research report. Confidentiality is more complex and cannot extend to the markers of student work or the reviewers of staff work, but can apply to the published outcomes. If confidentiality is required, what form applies?

- No confidentiality required
- Masking of organisation name in research report
- No publication of the research results without specific organisational consent
- Other by agreement as specified by addendum

Signature:



Date: 15.05.18

This form can be signed via email if the accompanying email is attached with the signer's personal email address included. The form cannot be completed by phone, rather should be handled via post.

RESEARCH ORGANISATION INFORMED CONSENT FORM

Faculty of Business and Law
University of Northumbria

Completion of this form is required whenever research is being undertaken by Business and Law staff or students within any organisation. This applies to research that is carried out on the premises, or is about an organisation, or members of that organisation or its customers, as specifically targeted as subjects of research.

The researcher must supply an explanation to inform the organisation of the purpose of the study, who is carrying out the study, and who will eventually have access to the results. In particular issues of anonymity and avenues of dissemination and publications of the findings should be brought to the organisations' attention.

Researcher's Name: Dawn Whitton
Student ID No. (if applicable):

Researcher's Statement:

The research forms part of DBA programme of study and will involve final year undergraduates at Northumbria University who are undertaking a BA Leadership and Management Programme of study on a part-time basis. Approximately, 200 students study this programme on a part-time basis through either taught delivery or via distance learning. The intention is to select 25 students covering a diverse range of ages and / or social-economic backgrounds. This will be undertaken by delivering a short presentation / briefing to potential participants to demonstrate the aim and purpose of the study and potential benefits to be derived from participating as I detail below. Distance learning students attend guidance days and the briefing could be delivered during the guidance day. A recording of the briefing session would also be provided on the Programme Site on Blackboard. I will request expressions of interest from the students to take part in the study, with the aim of securing in the region of 25 participants. This will therefore allow for any potential withdrawals from the study and it is envisaged that a final number of 15 participants will be achievable. If more than 25 expressions of interest are provided, I will use a purposive selection technique to select the participants. Taking part in the research will be voluntary and the students will be able to withdraw at any time.

As I am involved in the delivery of the participant's programme of study, I believe they will be willing to participate in the research as it will enable them to reflect on their journey through their final year. It will also be of benefit in terms of their self-reflection and personal development. This will be explained during the initial briefing. There is a risk of bias in terms of the responses by the participants due to my role as teacher / assessor and this will need reflexive consideration when collecting and analysing the primary data. However, as the participants will have graduated by the end of the research, the risk of bias should also be reduced. It should also be noted that as a DBA researcher, undertaking a study to refine and extend practice within my own area aligns with the ethos of the degree.

Primary data will be collected through a series of interviews as the student's progress through the final stages of their degree and within the first 6-9 months of graduation. The students are required to undertake a personal reflection as part of their final module (work-based project) and taking part in this research during their studies will be of benefit through enabling the participants to reflect on their own experience and areas for future development. Therefore, although the participants need to focus on their studies, taking

part in the research should add value to their studies and emerging career through being able to reflect on where they are now and where they would like to be.

The aim of the primary research is therefore to conduct interviews to evaluate the student experience as both a part-time learner and graduate. Composite case studies will be developed from the interviews to evaluate graduate identity from the perspective of the participant. It is envisaged that three interviews will be held with each participant. Interviews have been selected as the chosen method of data gathering to enable active interaction between the interviewee and interviewer to encompass what employability means to the participants and how the participant's believe it impacts on their graduate identity. The first interview will be undertaken within the final year of study to examine the student's experience as a part-time learner and their motivations for undertaking the programme of study. The interview will be undertaken at a convenient time to avoid pinch points for the students, particularly in terms of the submission of assessments. The subsequent interviews will be undertaken after graduation which will also minimise the impact of taking part in the research during their final year of study. Interviews will be semi-structured and developed to form a discussion about the participant's perspective on employability. The participant's will be able to reflect on their experiences and perceptions. For example, the discussion could focus on their experience at an interview or an internal promotion.

All data collection will be undertaken by myself, Dawn Whitton. Both the identity of the University and participant's will be kept anonymous. The findings will be disseminated internally within the University in terms of being listed on the research portal. It is hoped that the findings will also be disseminated at conferences and within journals to contribute to academic research.

Any organisation manager or representative who is empowered to give consent may do so here:

Name: Jonny Hall

Position/Title: Faculty APVC Learning and Teaching

Organisation Name: Faculty of Business and Law

Location: CCE1

If the organisation is the Faculty of Business and Law please completed the following:

Start/End Date of Research / Consultancy project:	Start: October 2014 End: October 2018
Programme Year Sample to be used: seminar group, entire year etc.	DBA Academic Year 2016/17 Participants to be as detailed in the above statement
Has Programme Director/Leader, Module Tutor being consulted, informed.	Yes.

Anonymity must be offered to the organisation if it does not wish to be identified in the research report. Confidentiality is more complex and cannot extend to the markers of student work or the reviewers of staff work, but can apply to the published outcomes. If confidentiality is required, what form applies?

- No confidentiality required
- Masking of organisation name in research report
- No publication of the research results without specific organisational consent
- Other by agreement as specified by addendum

Signature: Jonny Hall Date:11.1.17

This form can be signed via email if the accompanying email is attached with the signer's personal email address included. The form cannot be completed by phone, rather should be handled via post.

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Student ID No: c355629

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The intention is to obtain responses from a diverse group of part-time learners, covering a diverse range of ages and / or social-economic backgrounds. Eligibility to take part in the study will be justified within the research methodology.

The survey will be undertaken by emailing all eligible participants, requesting their assistance through the completion of an on-line questionnaire. The purpose of the study will be detailed in the email link and at the start of the questionnaire. Taking part in the research will be voluntary and the participants will be able to withdraw from completing the questionnaire at any time. The students will not be required to provide their name or contact details and all participants taking part in the study will remain anonymous.

As the primary data will be collected through an online questionnaire, the length of time, which the participants will need to allocate to the completion of the questionnaire, should not exceed 10-15 minutes. This is to maintain the interest of the participants whilst also being mindful that the students need to focus on their studies. The link to the survey will however, emphasise the importance of taking part in the research in terms of the value it contributes to their studies and emerging career through being able to reflect on where they are now and where they would like to be. To ensure the questionnaire is not ambiguous or too time consuming, a pilot study will be undertaken at each institution involved in the study prior to the final distribution of the questionnaire. A focus group meeting will be held with each pilot group to obtain verbal feedback on the structure and content of the survey.

The aim of the primary research is therefore to collect quantitative data to investigate the participant's perceptions of the conceptualisations of employability and existing models.

All data collection will be undertaken by myself, Dawn Whitton. The identity of the participants will be kept anonymous although it is intended to include the name of the institutions involved in the study to be named. The findings will be disseminated internally within the University in terms of being listed on the research portal. I aim to disseminate the

findings and recommendations at conferences such as SRHE and within journals to contribute to academic research. The HEI's who have agreed to provide access to their students are keen to undertake further research on completion of the thesis and work in collaboration to publish the findings further.

Any organisation manager or representative who is empowered to give consent may do so here:

Name: Mohsin Aboobaker

Position/Title: Careers and Employability Manager

Organisation Name: Birkbeck, University of London

Location: London.

Anonymity must be offered to the organisation if it does not wish to be identified in the research report. Confidentiality is more complex and cannot extend to the markers of student work or the reviewers of staff work, but can apply to the published outcomes. If confidentiality is required, what form applies?

- No confidentiality required
- Masking of organisation name in research report
- No publication of the research results without specific organisational consent
- Other by agreement as specified by addendum

Signature: Mohsin Aboobaker Date: 21st May 2018

This form can be signed via email if the accompanying email is attached with the signer's personal email address included. The form cannot be completed by phone, rather should be handled via post.

Implied consent – Introduction page to Pilot Survey Questionnaire

Employability and part-time students (pilot)

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Survey map
Survey appearance
Survey settings
Survey files
Survey permissions
Test survey

► Preview survey

When creating your survey, we recommend the use of a privacy notice, this should explain to survey respondents about data protection officer may be able to provide advice and guidance on creating a suitable privacy notice for your survey.

p. 1 Page 1

Ac

 Thank you for agreeing to take part in this **pilot survey** which will contribute to the development of a final questionnaire. I am a Senior Lecturer at Northumbria University and alongside my full-time job, I am studying part-time for a Doctorate in Business Administration (DBA). I have taught on full and part-time programmes of study both at undergraduate and postgraduate level. I have also studied part-time and appreciate the challenges this can pose. I am, however, particularly interested in how the construct of graduate employability relates to part-time students. The aim of my thesis is therefore to investigate the conceptualisations of graduate employability and determine their relevance in the career preparedness for part-time students. By taking part in this study, your answers will contribute to the further analysis and evaluation of existing employability models and conceptualisations. The findings of the research will be of benefit to Higher Education Institutions and contribute to curriculum development and employability strategies for part-time students.

Ethical approval has been received to undertake the survey. By completing this on-line questionnaire, you are providing implied consent for your responses to be included within the pilot survey. Your responses are however, confidential and anonymous and you will not be identified within the study. You can withdraw from the survey at any stage during its completion. If you have any queries in connection with the survey, please feel free to email me: dawn.whitton@northumbria.ac.uk

Many thanks for your help and support, it is very much appreciated.

Dawn

Implied consent – Stage 1 and Stage 2 Survey Questionnaires

Employability and part-time students - final


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When creating your survey, we recommend the use of a privacy notice, this should explain to survey respondents data protection officer may be able to provide advice and guidance on creating a suitable privacy notice for your

p. 1 Survey

 Hello and thank you for taking the time to take part in this survey which concerns part-time students and how the conceptualisations of graduate employability relate to your career preparedness. I am a Senior Lecturer at Northumbria University and alongside my full-time job, I am studying part-time for a Doctorate in Business Administration (DBA). I have taught on full and part-time programmes of study both at undergraduate and postgraduate level. I have also studied part-time and appreciate the challenges part-time study can pose.

Through taking part in this survey, your responses will contribute to the primary data collection for my study. The findings of the research will help inform curriculum development and employability strategies for part-time students within Higher Education. The survey will take approximately 5 minutes to complete.

Ethical approval has been recieved to undertake the survey. By completing this on-line questionnaire, you are providing implied consent for your responses to be included within the survey. Your responses are however, confidential and anonymous and you will not be identified within the study. You can withdraw from the survey at any stage during its completion. If you have any queries in connection with the survey, please feel free to email me: dawn.whitton@northumbria.ac.uk

Many thanks for your help and support, it is very much appreciated.

Dawn

Employability and part-time students - stage two


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► Preview survey

When creating your survey, we recommend the use of a privacy notice, this should explain to survey respondents about how yo data protection officer may be able to provide advice and guidance on creating a suitable privacy notice for your survey.

p. 1 Survey Add item

 Thank you for taking the time to take part in this survey which specifically targets part-time students. The survey will take approximately 5 minutes to complete. Your participation will however, have a significant impact on my research and your responses are therefore extremely valued.

I am a Senior Lecturer at Northumbria University and alongside my full-time job, I am studying part-time for a Doctorate in Business Administration (DBA). I have taught on full and part-time programmes of study both at undergraduate and postgraduate level. I have also studied part-time and appreciate the challenges part-time study can pose.

In 2018, I collected data from 369 part-time students and based on the outcomes of these findings, developed a conceptual model of employability for part-time learners. Through completing the following questionnaire, I will be able to further test this model. The outcome of this research will help inform curriculum development and employability strategies for part-time students within Higher Education.

Ethical approval has been recieved to undertake the survey. By completing this on-line questionnaire, you are providing implied consent for your responses to be included within the survey. Your responses are however, confidential and anonymous and you will not be identified within the study. You can withdraw from the survey at any stage during its completion. If you have any queries in connection with the survey, please feel free to email me: dawn.whitton@northumbria.ac.uk

Many thanks for your help and support, it is very much appreciated.

Dawn

Appendix 2

Questionnaires for research scoping exercise

Please indicate if you agree or disagree with each of the following statements (circle the response which you relate to best). If you cannot relate to the question – please circle not applicable

1	My competence is sought-after in the labour market.	Agree / Disagree / Not Applicable
2	I have a contact network that I can use to get a new (equivalent or better) job.	Agree / Disagree / Not Applicable
3	I know of other organisations/companies where I could get work.	Agree / Disagree / Not Applicable
4	My personal qualities make it easy for me to get a new (equivalent or better) job in a different company/organisation.	Agree / Disagree / Not Applicable
5	My experience is in demand on the labour market.	Agree / Disagree / Not Applicable

Based on the measure of perceived employability (Berntson & Marklund, 2007) – (adapted)

6	Even if there was downsizing my current employment, I am confident that I would be retained.	Agree / Disagree / Not Applicable
7	My personal networks help me in my career development	Agree / Disagree / Not Applicable
8	I am aware of the opportunities arising even if they are different to what I do now.	Agree / Disagree / Not Applicable
9	The skills I have gained in my present job are transferable to other occupations	Agree / Disagree / Not Applicable
10	I could easily retrain to make myself more employable elsewhere.	Agree / Disagree / Not Applicable
11	I have a good knowledge of opportunities for me even if they are quite different to what I do now.	Agree / Disagree / Not Applicable
12	Among the people who do the same job as me, I am well respected	Agree / Disagree / Not Applicable
13	If I needed to, I could easily get another job like mine in a similar organisation.	Agree / Disagree / Not Applicable
14	I could easily get a similar job to mine in almost any organisation.	Agree / Disagree / Not Applicable
15	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers.	Agree / Disagree / Not Applicable
16	I could get a job anywhere, so long as my skills and experience were reasonably relevant	Agree / Disagree / Not Applicable

Adapted from self-perceived employability scale items (Rothwell & Arnold, 2007)

17	I achieve high grades in relation to my studies.	Agree / Disagree / Not Applicable
18	I regard my academic work as top priority.	Agree / Disagree / Not Applicable
19	Employers are eager to employ graduates from my university.	Agree / Disagree / Not Applicable
20	The status of this university is a significant asset to me in job seeking.	Agree / Disagree / Not Applicable
21	Employers specifically target this university in order to recruit individuals from my subject area(s).	Agree / Disagree / Not Applicable
22	My university has an outstanding reputation in my field(s) of study.	Agree / Disagree /

		Not Applicable
23	A lot more people apply for my degree than there are places available.	Agree / Disagree / Not Applicable
24	My chosen subject(s) rank (s) highly in terms of social status.	Agree / Disagree / Not Applicable
25	People in the career I am aiming for are in high demand in the external labour market.	Agree / Disagree / Not Applicable
26	My degree is seen as leading to a specific career that is generally perceived as highly desirable.	Agree / Disagree / Not Applicable
27	There is generally a strong demand for graduates at the present time.	Agree / Disagree / Not Applicable
28	There are plenty of job vacancies in the geographical area where I am looking.	Agree / Disagree / Not Applicable
29	I can easily find out about opportunities in my chosen field.	Agree / Disagree / Not Applicable
30	The skills and abilities that I possess are what employers are looking for.	Agree / Disagree / Not Applicable
31	I am generally confident of success in job interviews and selection events.	Agree / Disagree / Not Applicable
32	I feel I could get any job so long as my skills and experience are reasonably relevant.	Agree / Disagree / Not Applicable

Student Self-perceived employability scale items (Rothwell, Herbert & Rothwell, 2008)

33	The teaching on my programme of study has encouraged discussion.	Agree / Disagree / Not Applicable
34	The teaching on my programme of study has helped me to think critically about my subject.	Agree / Disagree / Not Applicable
35	This year's work requires me to be more independent than last year's did.	Agree / Disagree / Not Applicable
36	Experience of the work environment has helped me to focus my academic studies.	Agree / Disagree / Not Applicable
37	I have a broad understanding on my subject area.	Agree / Disagree / Not Applicable
38	Workplace experience has enabled me to become more confident in higher education.	Agree / Disagree / Not Applicable
39	What I have learned in the workplace has helped me in my academic studies.	Agree / Disagree / Not Applicable
40	I am not sure what subject-specific skills I can claim to have.	Agree / Disagree / Not Applicable
41	I understand how I learn most effectively.	Agree / Disagree / Not Applicable
42	In my academic work I have been able to apply skills that I have developed in work environments.	Agree / Disagree / Not Applicable
43	I feel confident in my academic work.	Agree / Disagree / Not Applicable
44	Whilst in higher education I have learned some strategies that help me to succeed on novel problems.	Agree / Disagree / Not Applicable
45	I have become skilful in my subject specialism.	Agree / Disagree / Not Applicable
46	The work experience I have had has made me think about what I need to do in my studies to develop a graduate-level career.	Agree / Disagree / Not Applicable

47	I have not been encouraged to consider how the things I do outside the formal academic programme can provide evidence in support of graduate-level employment	Agree / Disagree / Not Applicable
48	I am not sure what subject knowledge I will need for my preferred future career.	Agree / Disagree / Not Applicable
49	I know what general skills employers expect of graduate level employees.	Agree / Disagree / Not Applicable
50	I do not know the extent to which my current capabilities fit the expectations of graduate-level employment.	Agree / Disagree / Not Applicable
51	I find it hard to assess my strengths and weaknesses as a competitor in the graduate labour market.	Agree / Disagree / Not Applicable
52	I have enhanced the general skills that make people effective in employment.	Agree / Disagree / Not Applicable
53	I can provide an employer (or other interested party) with evidence of my general skills.	Agree / Disagree / Not Applicable
54	I have built up a portfolio of evidence of my achievements.	Agree / Disagree / Not Applicable
55	I expect that I will be effective in a graduate-level job.	Agree / Disagree / Not Applicable

Employability Experience Questionnaire items (Yorke & Knight, 2007)

Appendix 3

Questionnaire for pilot study

<i>Human Capital</i>		
1. I am confident about my written communication skills for various audiences	Dacre Pool, Qualter and Sewell (2014)	
2. I have good oral communication skills	Dacre Pool, Qualter and Sewell (2014)	Include from pilot due to feedback from pilot study and use of the term 'general skills'
3. I have become skilful in my subject specialism	York and Knight (2007) EEQ	Item modified using seven-point Likert scale from the original five-point Likert Scale measurement
4. My skills for doing the type of work I want to do are up to date	Wittekind (2010)	
5. I am studying to upgrade my knowledge and expand my mind	Lee and Pang 2014	Adapted to include "I am studying...."
6. I am studying to gain valuable skills for my career	Lee and Pang 2014	
<i>Cultural Capital</i>		
7. I find it easy to get cooperation and support from others when working in a team	Coetzee (2014)	Workplace added to the end of the question based on feedback from the pilot
8. I find it easy to communicate effectively with people from different cultures, backgrounds and authority levels	Coetzee (2014)	
9. I can gain support from other for recommendations and ideas	Coetzee (2014)	
10. I find it easy to quickly gain respect from others.	Coetzee (2014)	
11. I am studying to be recognised as a good role model for others	Lee and Pang 2014	Adapted to include "I am studying...." And 's' added to other
<i>Psychological Capital</i>		
12. My working, learning and living are in harmony	Van Der Heijde and Van Der Heijden (2006)	Item modified using seven-point Likert scale from the original six-point Likert Scale measurement
13. I am willing to put in a great deal of effort beyond that normally	Rothwell and Arnold (2007)	

expected in order to help make my profession successful		
14. I find it important to develop myself in a broad sense, so I will be able to perform different task activities or jobs within an organisation	Van Dam (2004)	
15. I have a very positive attitude to changes in my function.	Van Der Heijde and Van Der Heijden (2006)	Likert scale from the original six-point Likert Scale measurement
16. I take action to develop my goals	Coetzee	Adapted – word ‘developed used instead of achieve
17. I am studying just for the joy of learning	Lee and Pang 2014	Adapted to include “I am studying....”
<i>Social Capital</i>		
18. I can use my professional networks and business contact to develop my career	Rothwell and Arnold	
19. Employers are eager to employ graduates from my university	Rothwell, Herbert and Rothwell	Adapted to include the word prospective
20. The status of this university is a significant asset to me in job seeking	Rothwell, Herbert and Rothwell	
21. My chosen subject(s) rank(s) highly in terms of social status	Rothwell, Herbert and Rothwell	
22. I am able to build wide and effective networks of contacts to achieve my goals	Coetzee (2014)	
23. Initiating conversations with friends and relatives about careers will result in obtaining your career goals		‘your’ changed to ‘my’ based on comments from the pilot
<i>Career Capital – graduate identity</i>		
24. I have no clear sense of a future career direction that would be meaningful for me	Praskova, Creed and Hood, 2014	
25. I have chosen a career path that will give a purpose to my life	Praskova, Creed and Hood, 2014	
26. Preparing for my career is contributing to my personal growth	Praskova, Creed and Hood, 2024	
27. All I want to do now is to pursue the career that is inspiring me.	Praskova, Creed and Hood, 2024	
28. I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful	Praskova, Creed and Hood, 2024	
29. At this time, it is important for me to work at the job I prefer	Praskova, Creed and Hood, 2024	‘You’ changed to ‘me’ and job to ‘I prefer
Career Management		
<i>Self-Management</i>		

30. I know where to find out information about jobs that interest me	Dacre Pool, Qualter & Sewell (2013)	
31. I know what kinds of work would suit my personality	Dacre Pool, Qualter & Sewell (2013)	Kinds to kind
32. I know what I want to do when I finish my degree	Dacre Pool, Qualter & Sewell (2013)	
33. I know what is required from me to successfully secure the sort of work I want to do	Dacre Pool, Qualter & Sewell (2013)	
34. I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person	Coetzee (2014)	
35. I am studying to fit my future career plan	Lee and Pang 2014	Adapted to include "I am studying." 'fit changed to 'prepare for'
Signal Management		
36. I can explain the value of my experience to a potential employer	Dacre Pool, Qualter & Sewell (2013)	
37. I don't find it difficult to prove my capability to others	Wittekind et al (2010)	
38. I can structure information in a way that meets the needs of my audience	Coetzee (2014)	
39. I usually make a favourable first impression	Coetzee (2014)	
40. An employer would be impressed with my qualifications	Wittekind et al (2010)	
Labour market demand		
41. In formulating my career goals, I take account of external market demand	Van Der Heijde and Van Der Heijden (2006)	Item modified using seven-point Likert scale from the original six-point Likert Scale measurement
42. Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals		
43. Students on my course are very much in demand	Alvarez-Gonzalez et al. (2017)	
44. I follow developments in the field of industry and employment regularly	Wittekind et al. (2010)	
45. Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers	Rothwell and Arnold	
Self-perceived employability		
46. I am confident that I would find another job if I started searching	Wittekind et al. (2010)	
47. When I make plans for my career, I am confident I can make them work	Kossek et al. (1998)	

48. When I decide to do something about my career, I go right to work on it.	Kossek et al (1998)	
49. My academic performance so far is in line with my career aspirations		
50. I am actively trying to increase my employability	Van Dam (2004)	Item modified using seven-point Likert scale from the original undisclosed Likert Scale measurement
51 I am studying to satisfy intellectual curiosity	Lee and Pang 2014	Adapted to include “I am studying....”
52. I am studying to upgrade my knowledge and expand my mind	Lee and Pang 2014	Adapted to include “I am studying....”
53. I am studying to help me get a higher paid job	Lee and Pang 2014	Adapted to include “I am studying....”
54. I am studying to keep up my academic qualification on par with my family members, friends or colleagues	Lee and Pang 2014	Adapted to include “I am studying....”
55. I am studying to get a break from the routine of home or work	Lee and Pang 2014	Adapted to include “I am studying....”

Appendix 4

Questionnaire for stage 1 and use in EFA

Measurement Topic:	Scale Items
Human Capital	I am confident about my written communication skills for various audiences (C1)
	I have good planning and organisational skills (C2)
	I have become skilful in my subject specialism (C3)
	My skills for doing the type of work I want to do are up to date (C4)
Cultural and Psychological Capital	I find it easy to get cooperation and support from others when working in a team within the workplace (C5)
	I can gain support from other for recommendations and ideas (C6)
	I take action to develop my goals (C7)
	I find it important to develop myself in a broad sense, so I will be able to perform different task activities or jobs within an organisation (C8)
Social Capital	I have a very positive attitude to changes in my function.(C9)
	I can use my professional networks and business contact to develop my career (C10)
	Prospective employers are eager to employ graduates from my university (C11)
	The status of this university is a significant asset to me in job seeking (C12)
	My chosen subject(s) rank(s) highly in terms of social status (C13)
Career Capital	I am able to build wide and effective networks of contacts to achieve my goals (C14)
	I have a future career direction that would be meaningful for me (C15)
	I have chosen a career path that will give a purpose to my life (C16)
	All I want to do now is to pursue the career that is inspiring me. (C17)
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful (C18)
Career Management Signal and Self-management	Students on my course are very much in demand (C19)
	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful (M1)
	Preparing for my career is contributing to my personal growth (M2)
	At this time, it is important for me to work at the job I prefer (M3)
	I know where to find out information about jobs that interest me (M4)
	I know what I want to do when I finish my degree (M5)
	I know what is required from me to successfully secure the sort of work I want to do (M6)
	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person (M7)
	I am studying to fit my future career plan (M8)
	I can explain the value of my experience to a potential employer (M9)
	I don't find it difficult to prove my capability to others (M10)
I can structure information in a way that meets the needs of my audience (M11)	

	When I make plans for my career, I am confident I can make them work (M12)
	When I decide to do something about my career, I go right to work on it. (M13)
<i>Self-perception (4 items)</i>	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers (E1)
	I know what kinds of work would suit my personality (E2)
	An employer would be impressed with my qualifications (E3)
	In formulating my career goals, I take account of external market demand (E4)
<i>Demand (4 items)</i>	Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals (E5)
	I follow developments in the field of industry and employment regularly (E6)
	I find it easy to quickly gain respect from others. (E7)
	I am confident that I would find another job if I started searching (E8)

Appendix 5

Revised questionnaire based on the findings and analysis from Stage 1

Revised questionnaire from findings and analysis utilising EFA:	Scale Items
<i>Capital (Ambition)</i>	I have chosen a career path that will give a purpose to my life
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful
	I have a future career direction that would be meaningful for me
	All I want to do now is to pursue the career that is inspiring me
<i>Capital (Knowledge and Networks)</i>	I have become skilful in my subject specialism
	My skills for doing the type of work I want to do are up to date
	I can gain support from other for recommendations and ideas
	I can use my professional networks and business contact to develop my career
	I am able to build wide and effective networks of contacts to achieve my goals
<i>Capital (Esteem)</i>	The status of this university is a significant asset to me in job seeking
	Students on my course are very much in demand
	Prospective employers are eager to employ graduates from my university
	My chosen subject(s) rank(s) highly in terms of social status
<i>Career management (Confidence)</i>	I know where to find out information about jobs that interest me
	I can explain the value of my experience to a potential employer
	I don't find it difficult to prove my capability to others
	I can structure information in a way that meets the needs of my audience
<i>Career management (Determination)</i>	I know what I want to do when I finish my degree
	I know what is required from me to successfully secure the sort of work I want to do
	At this time, it is important for me to work at the job I prefer
	When I make plans for my career, I am confident I can make them work
<i>Career management (Commitment)</i>	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person
	When I decide to do something about my career, I go right to work on it.
	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful
	Preparing for my career is contributing to my personal growth
<i>Employability (market awareness)</i>	Obtaining information on the labour market and general job opportunities in my career area will result in obtaining my career goals
	In formulating my career goals, I take account of external market demand
	I follow developments in the field of industry and employment regularly
<i>Employability (self-belief)</i>	An employer would be impressed with my qualifications
	I find it easy to quickly gain respect from others
	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers
	I know what kinds of work would suit my personality

Appendix 6

Original Demographics prior to modification to remove redundant responses.

Demographics	Number	% (total)
Gender		
Male	227	44.9%
Female	277	54.7%
Rather not to say	2	0.4%
Age Group		
18-24	76	15%
25-34	165	32.6%
35-44	151	29.8%
45-54	85	16.8%
55-64	28	5.5%
65 and over	1	0.2%
Rather not to say	0	0%
Average annual pre-tax personal income		
Less than £9,999	43	8.5%
£10,000 to £19,999	102	20.2%
£20,000 to £29,999	108	21.3%
£30,000 to £39,999	76	15%
£40,000 to £49,999	71	14%
£50,000 to £59,999	28	5.5%
£60,000 or more	33	6.5%
Prefer not to answer	45	8.9%
Institution		
Northumbria University	354	70%
Teesside University	112	22.1%
Birkbeck University	13	2.6%
Rather not say	27	5.3%
Programme of Study		
Undergraduate	166	166%
Postgraduate	241	241%
Certificate/Diploma of HE	17	17%
Postgraduate Certificate	24	24%
Postgraduate Diploma	13	13%
Degree Apprenticeship	45	8.9%
Employment Status		
Working full-time (35hrs or more per week)	367	72.5%
Working part-time (between 8 & 34 hrs per week)	93	18.4%
Working less than 8hrs per week	3	0.6%
Temporarily unemployed - actively seeking work	15	3%
Temporarily unemployed - actively seeking work	8	1.6%
Temporarily unemployed -not currently seeking work	6	1.2%
Temporarily unemployed -not currently seeking work	2	0.4%
Retired	12	2.4%
Permanently unemployed / unable to work		
A full-time carer (home / family)		
Total number of responses (per section)	506	100%

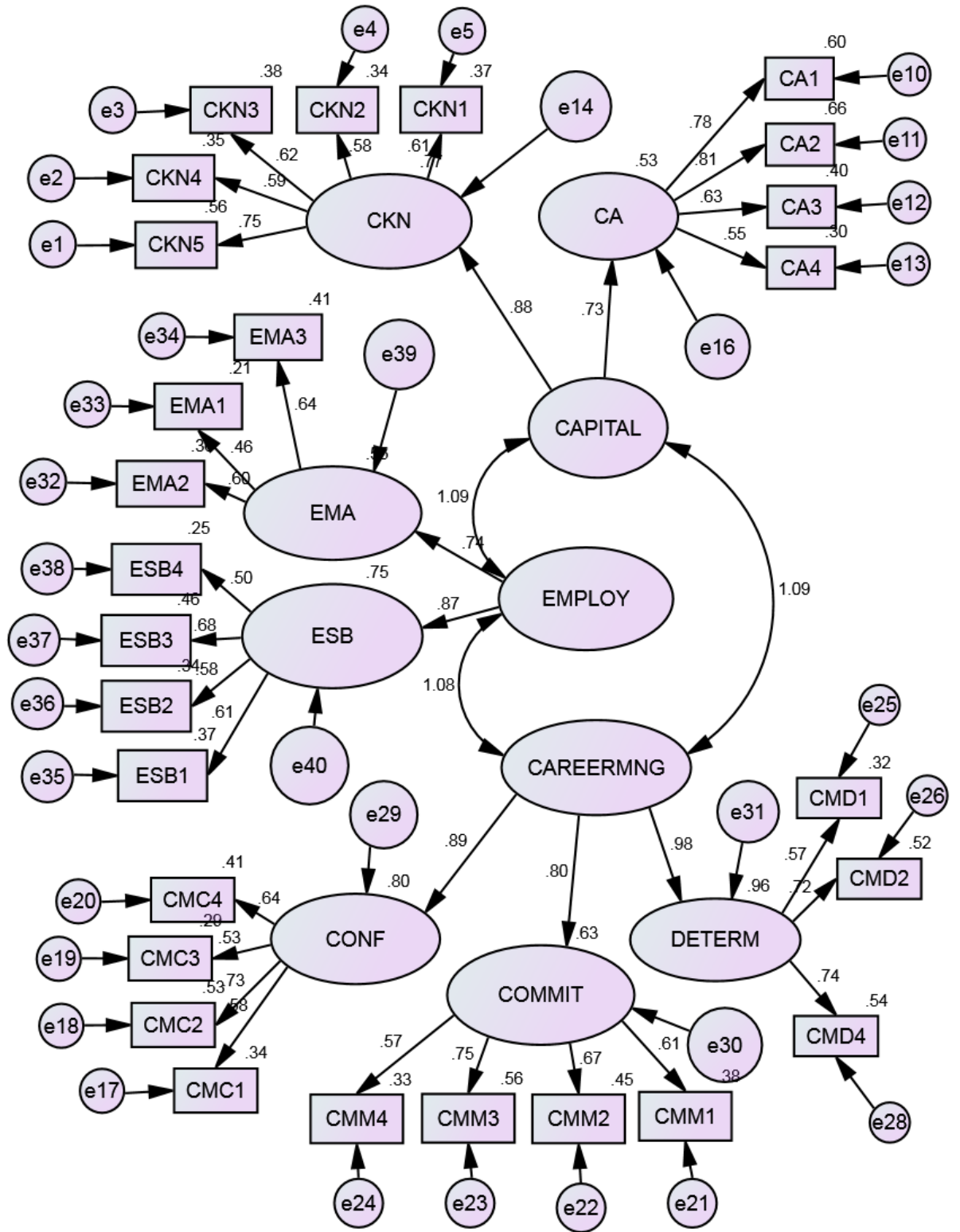
Appendix 7

Substantive questionnaire from Stage 2 and SEM analysis

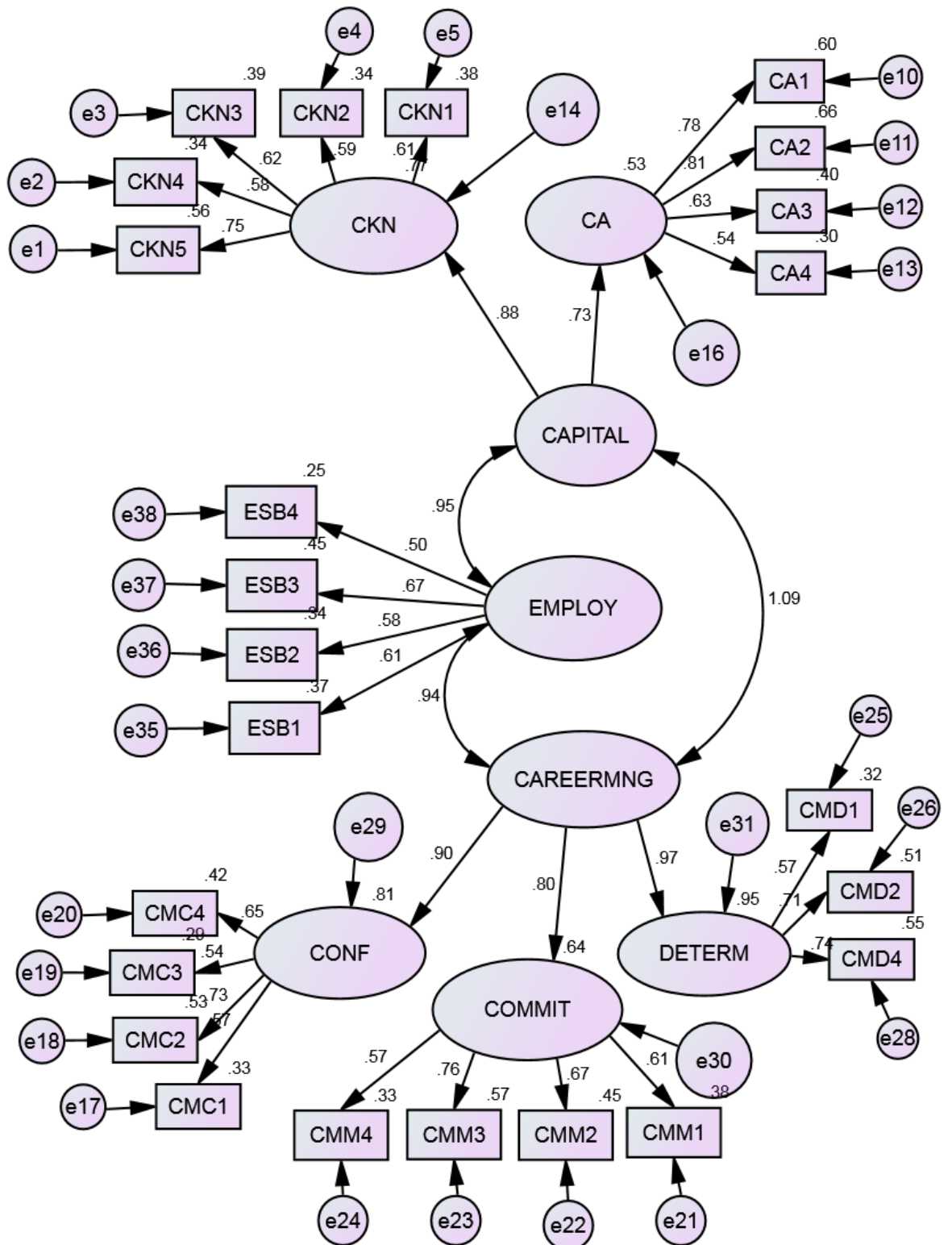
Revised questionnaire from SEM:	Scale Items
<i>Capital (Ambition)</i>	I have chosen a career path that will give a purpose to my life
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful
	I have a future career direction that would be meaningful for me
<i>Capital (Knowledge and Networks)</i>	I have become skilful in my subject specialism
	My skills for doing the type of work I want to do are up to date
	I can gain support from other for recommendations and ideas
	I am able to build wide and effective networks of contacts to achieve my goals
<i>Career management (Confidence)</i>	I know where to find out information about jobs that interest me
	I can explain the value of my experience to a potential employer
	I don't find it difficult to prove my capability to others
<i>Career management (Determination)</i>	I know what I want to do when I finish my degree
	I know what is required from me to successfully secure the sort of work I want to do
	When I make plans for my career, I am confident I can make them work
<i>Career management (Commitment)</i>	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person
	When I decide to do something about my career, I go right to work on it.
	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful
<i>Employability (self-belief)</i>	An employer would be impressed with my qualifications
	I find it easy to quickly gain respect from others
	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers

Appendix 8 - Measurement Model Iterations – CFA

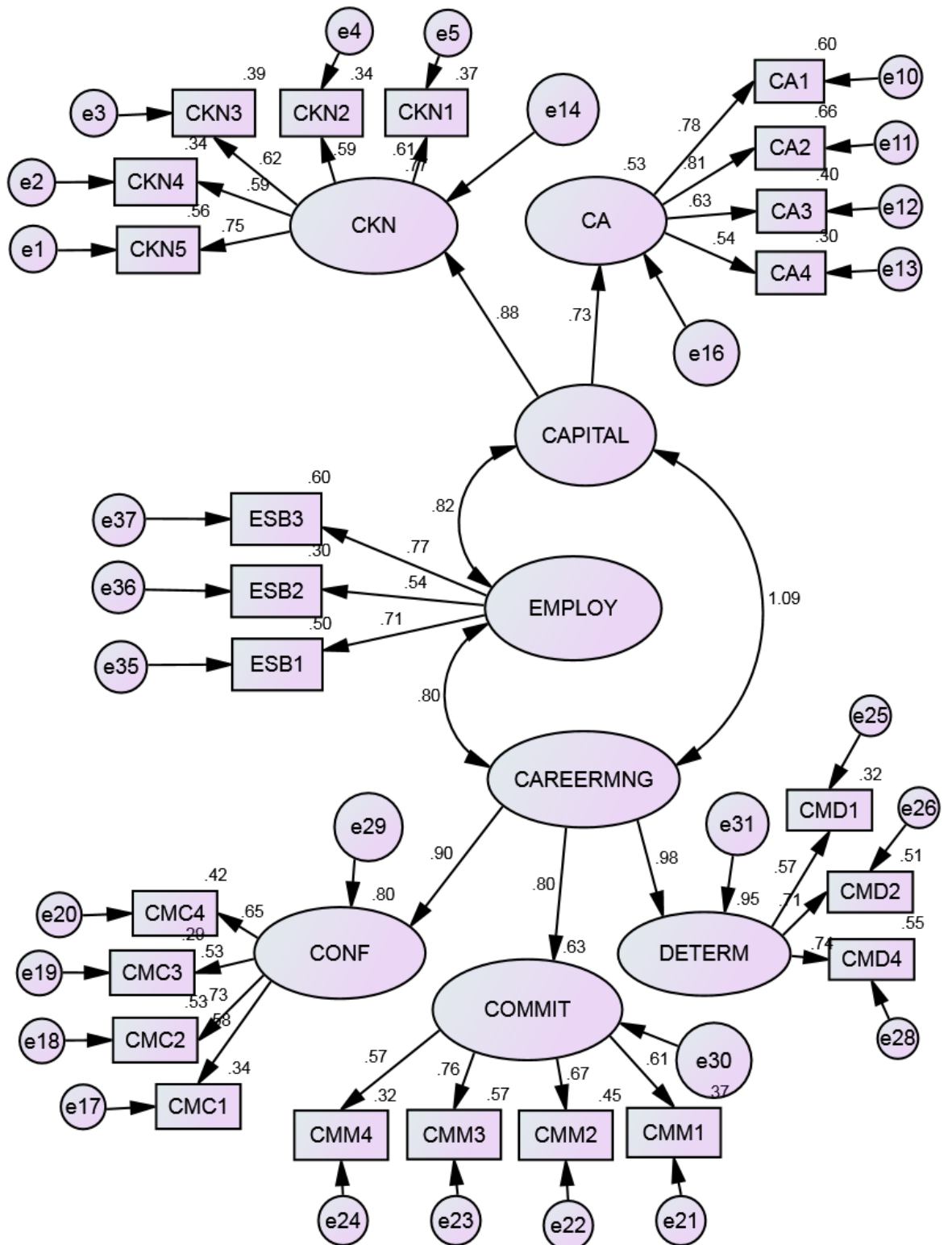
Measurement Model – 1st Iteration: Omission of CMD3



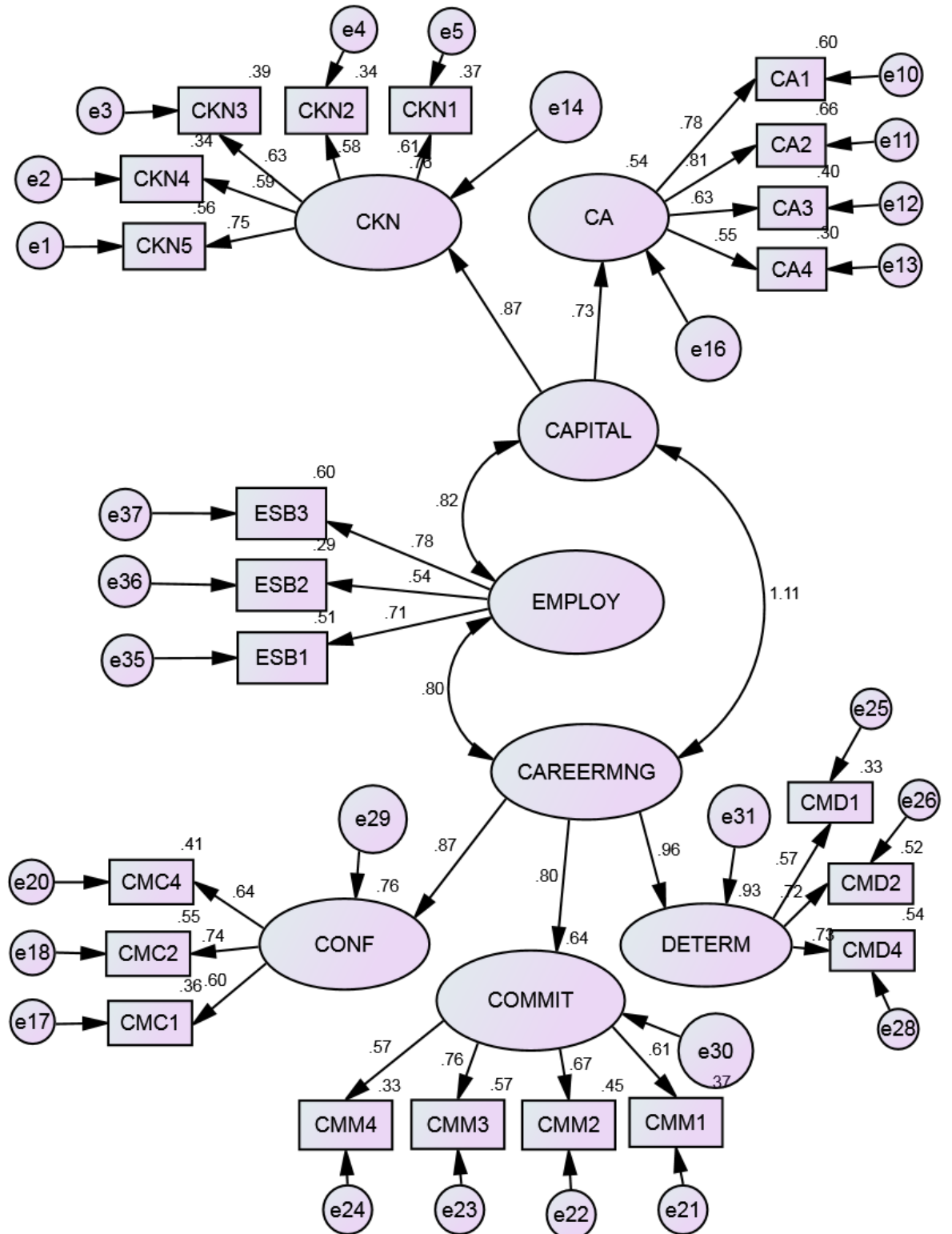
Measurement Model – 2nd Iteration: Omission of EMA Construct



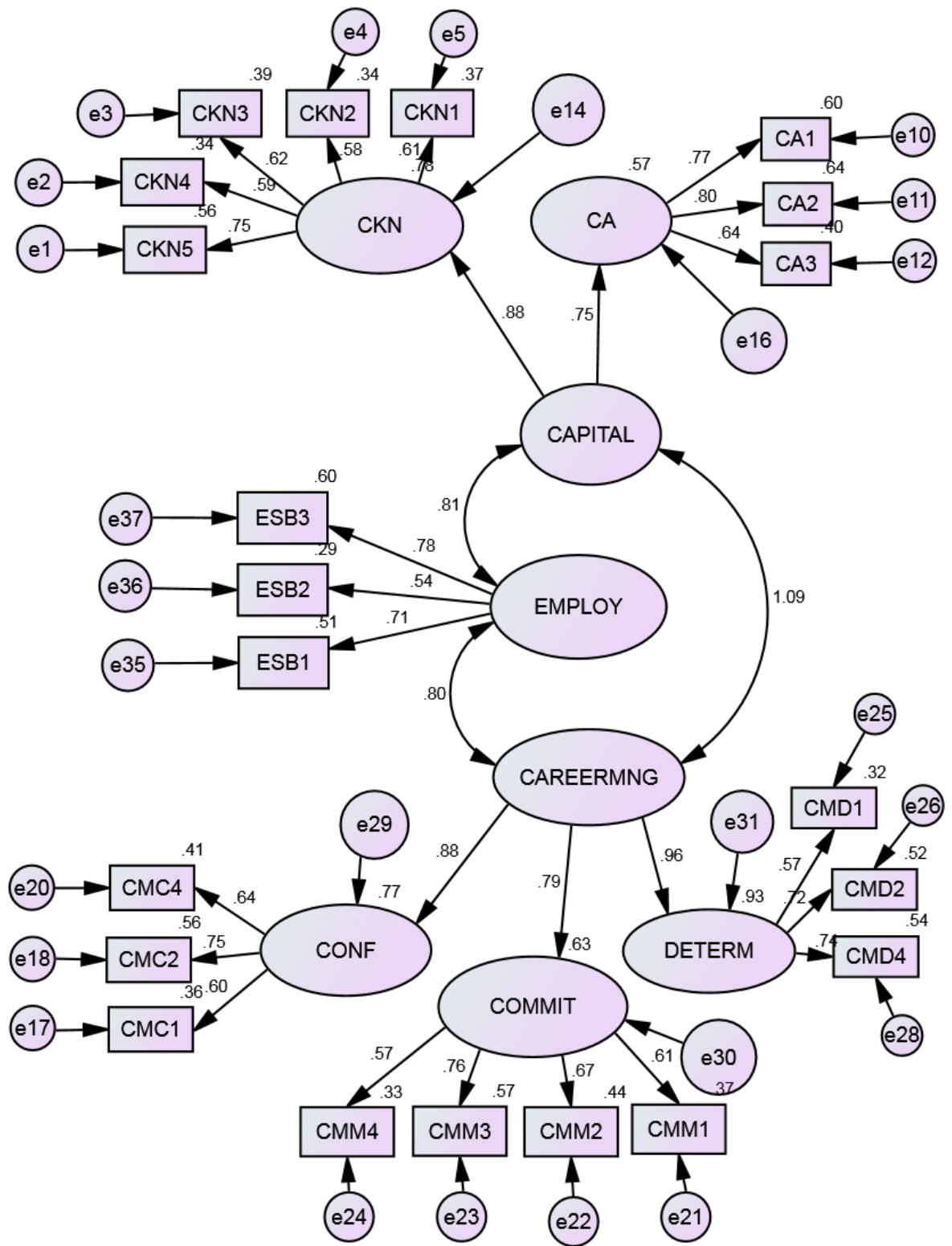
Measurement Model – 3rd Iteration: Omission of Item ESB4



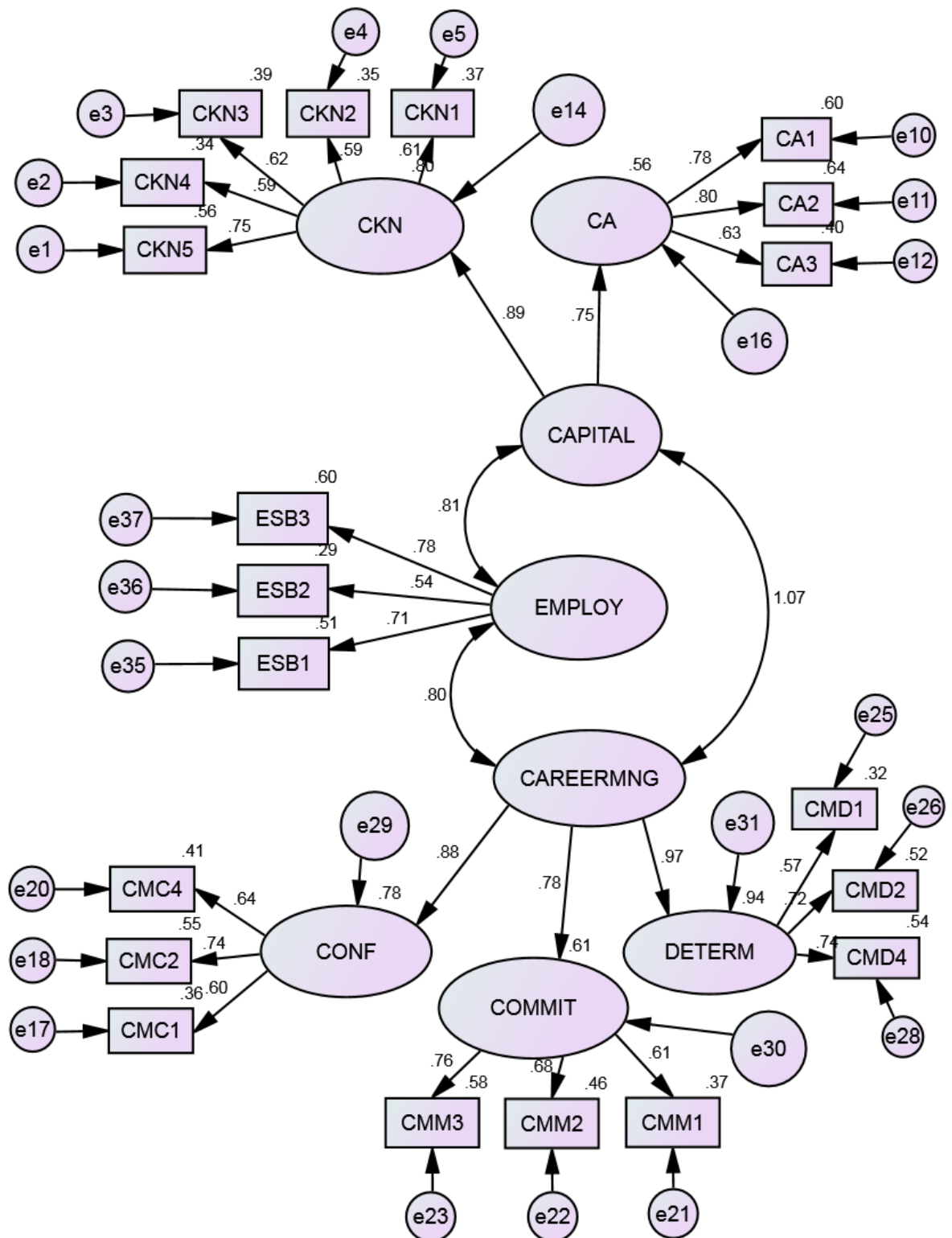
Measurement Model – 4th Iteration: Omission of Item CMC3



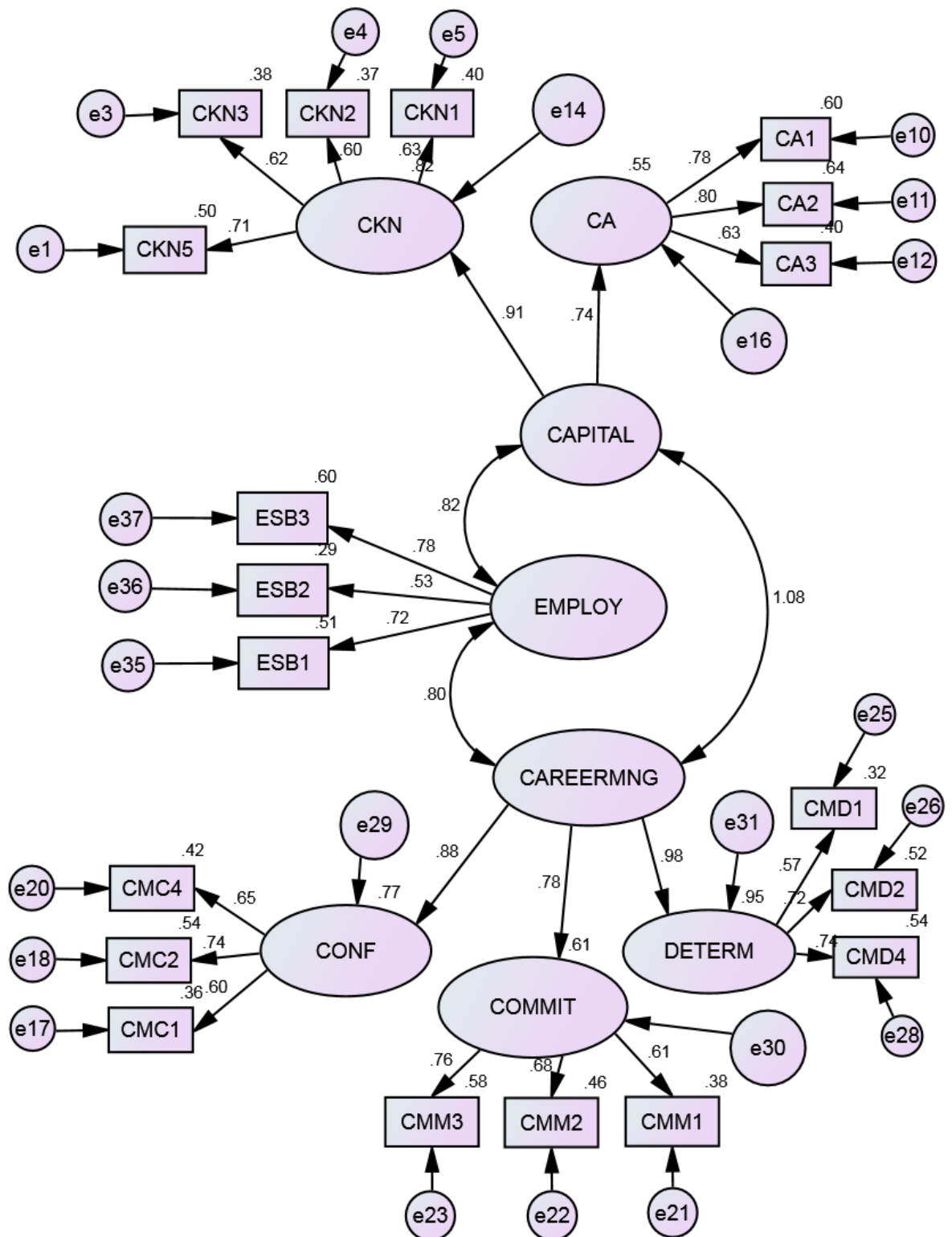
Measurement Model – 5th Iteration: Omission of Item CA4



Measurement Model – 6th Iteration: Omission of Item CMM4

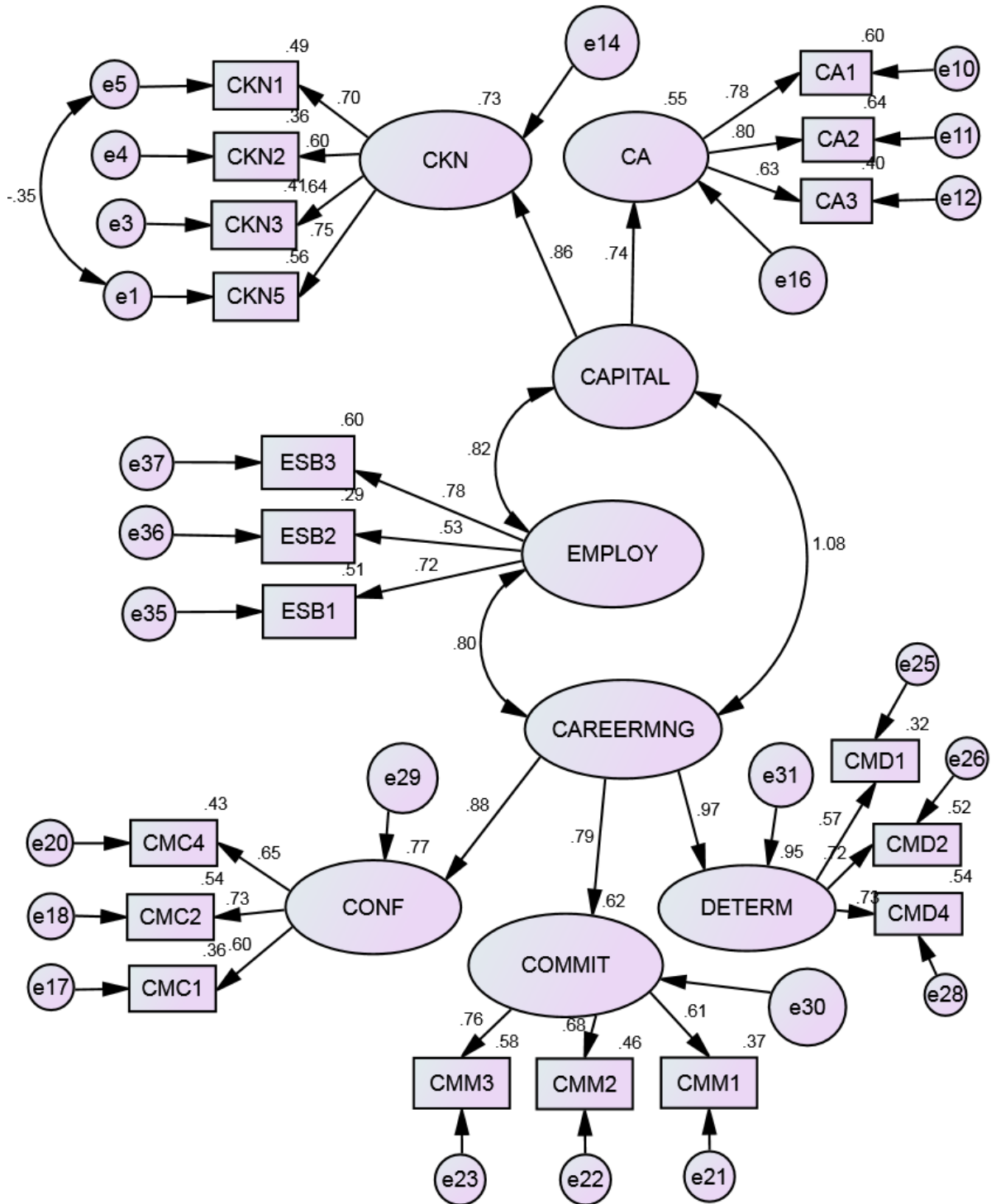


Measurement Model – 7th Iteration: Omission of Item CKN4



Appendix 9

Measurement Model – Modification Indices



Appendix 10

Self-assessment tool – based on the Career Enhancement Model

Developed from Career Enhancement Model of Employability, this questionnaire is a self-assessment tool and designed for students in Higher Education studying a part-time programme of study. This includes Distance Learning modes of study and those undertaking a Degree Apprenticeship. The aim of the questionnaire is to assist in identifying areas for development to enhance your employability. Based on assessing your self-belief in relation to your graduate employability and career readiness, the responses may be beneficial in identifying areas for further development and support

Section	Statements	Rate yourself scale of 1 to 10, 1 being the lowest & 10 the highest
Section 1	I have chosen a career path that will give a purpose to my life	
	I feel a sense of satisfaction because I have chosen a career path that I see as personally meaningful	
	I have a future career direction that would be meaningful for me	
	Score	
Section 2	I have become skilful in my subject specialism	
	My skills for doing the type of work I want to do are up to date	
	I can gain support from other for recommendations and ideas	
	I am able to build wide and effective networks of contacts to achieve my goals	
	Score	
Section 3	I know where to find out information about jobs that interest me	
	I can explain the value of my experience to a potential employer	
	I don't find it difficult to prove my capability to others	
	Score	
Section 4	I know what I want to do when I finish my degree	
	I know what is required from me to successfully secure the sort of work I want to do	
	When I make plans for my career, I am confident I can make them work	
	Score	
Section 5	I am always on the lookout for ways to improve my knowledge and skills, and develop myself as a person	
	When I decide to do something about my career, I go right to work on it.	
	I am willing to put in a great deal of effort beyond that normally expected in order to help make my profession successful	
	Score	
Section 6	An employer would be impressed with my qualifications	
	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers	
	I find it easy to quickly gain respect from others	
	Score	