DOCTORAL THESIS

“I think I am better off than I was when I arrived”: an exploration of international postgraduate student experiences at a UK university through the lens of their ‘academic self-concept'

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“I THINK I AM BETTER OFF THAN I WAS WHEN I ARRIVED”: AN EXPLORATION OF INTERNATIONAL POSTGRADUATE STUDENT EXPERIENCES AT A UK UNIVERSITY THROUGH THE LENS OF THEIR ‘ACADEMIC SELF-CONCEPT'

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Abstract

This thesis considers the Academic Self-concept (ASC) of international postgraduate students on taught courses in a Higher Education Institution in the UK. ASC relates to self-perception, attitudes and beliefs of one's skills and achievements in an academic area. It investigates their experiences of the academic activities required over their courses. This knowledge is important to HEIs to better understand their students and thus to ensure they are properly supported to achieve their aims. HEIs seek to attract and grow their international student numbers to improve diversity and to contribute to the institution's finances. Therefore, it is crucial they provide an appropriate and equitable teaching and learning environment to ensure its continuance.

The research comprised a longitudinal study over two and a half years of data collection in three waves incorporating the beginning, middle and end of the participants' PGT programmes. It used a combination of qualitative and quantitative research to gather data and an emergent grounded theory approach to analysis.

The findings revealed an ASC paradox in comparison to previous ASC research with examples of high and low ASC evident in some individuals at the same time. It demonstrated diversity in their self-perceptions of knowledge, ability, and confidence in academic activities, which changed over the duration of their courses. It showed that many were unfamiliar with PGT level academic activities, due to the differing nature and requirements of their undergraduate courses, especially some academic writing activities. Group work was an issue for some, demonstrating potentially undermining behaviour in response to others. Feedback and grades were found to be sources of validation, but not for all. Feedback can also be pivotal in ASC and how a person perceives their knowledge and abilities which impacts on their levels of confidence and trajectories of self-belief. It found that the participants were determined and resilient in the face of the unknown, creating individual personal networks of support and underutilizing university sources of support. Changes in self-belief could be either positive or negative dependent on previous experience of studying, feedback, social and dimensional comparison, and self-perception of ability.

This concept has not been used to consider PGT students in the UK using a qualitative instrument in combination with a quantitative inquiry in a longitudinal study. It provides a view from inside the participants' experiences and reveals attitudes and behaviours that would remain unknown without this investigation. It highlights issues for consideration for HEIs concerning how the students may be better supported.

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List of Abbreviations

List of abbreviations and commonly used terms. References are provided in this thesis.

- ALS Academic Language skills
- ADSS Faculty of Arts, Design & Social Sciences
- ASC Academic Self-concept
- B & L Faculty of Business & Law
- EE Faculty of Engineering & Environment
- GPA Grade Point Average
- HE Higher Education
- HEI Higher Education Institution
- HLS Faculty of Health & Life Sciences
- MBA Master of Business Administration
- PG Postgraduate
- PGT Postgraduate Taught Courses
- SDQ Self-descriptive Questionnaire
- SSI Semi-structured Interview
- UG Undergraduate

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Authors 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 commentary has been approved. Approval has been sought and granted through the Researcher's submission to Northumbria University's Ethics Online System on 6th September 2018.

I declare that the Word Count of this Thesis is 93,872 words

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Chapter One: Introduction

1.1. Chapter introduction

Chapter One will set the context and the rationale for the thesis. It will provide an overview of the research context and the rationale for the research questions, followed by the aims and objectives of the research. It will then provide an overview of the thesis structure.

1.2. The research context

International students play a crucial role in the higher education system of the UK. They provide diversity and are an important source of income for both institutions and the wider economy. They have become even more important due to the increasing financial pressures universities face. The falling value of home students' fees, increases in institutional pension contributions, competition for research funding, and high-quality staff and students to aid universities' standings, alongside unexpected happenings such as a global pandemic, all add to the mounting pressure on institutions. International students are a major contributory solution to these dilemmas. International students can be charged higher fees than home students and are willing to pay for UK HE experiences. This in turn may help them to boost their standing and may increase their employment prospects when they return home. It appears to be a mutually beneficial arrangement. However, many assumptions have been made regarding the academic abilities of international students and they are often criticised for lacking the necessary knowledge and academic skills required to complete UK HE courses well. This PhD thesis aims to investigate the experiences of international students in a UK higher education (HE) context, focussing specifically on international postgraduate students on taught courses (PGT).

1.3. Rationale for the research

Postgraduate students study experiences are under researched, especially with a focus on international students who have chosen to study in the UK. Other countries often take precedence in research journals when research has been undertaken (see for example Bui et al. (2021) Australia, Skyme & McGee (2016) New Zealand, NachtarSingh (2018) Malaysia). Holding an undergraduate qualification may be assumed to provide the necessary skills required to progress to a higher-level course. Some people in HEIs may think that this provides sufficient grounding which students can rely upon for successfully completing a PGT programme of study. This may be the reason little attention has been

given to the experiences of international PGT students. This thesis aims to begin to close the gap in the research into international PGT students' experiences of studying in the UK. It will draw upon the lens of Academic Self-concept derived by Shavelson, Hubner and Stanton (1976) which forms part of a much larger psychology concept known as General Self-concept. This is used to analyse self-perception, which includes three non-academic realms, in the form of Social, Emotional and Physical Self-concept and Academic Self-concept, which sits in Shavelson's et al. (1976) model alone and is separate from the other three realms listed above. Academic Self-concept has been used in educational research for decades, but mainly in the context of school age children and specific academic school subjects such as mathematics, English or languages, among others. Previous research using the concept has mainly used quantitative methods of analysis based on self-descriptive questionnaires. The researchers used the questionnaires to assess the school children's perceptions of their academic ability in the subject or subjects under investigation. These are also known as domains. This model will be discussed further in chapter two, the Literature Review, along with extensions of the model.

Academic Self-concept (ASC) as already mentioned, has been used to establish how an individual perceives their skills and achievements relative to the domain or domains under investigation. This can provide insight into the individual's behaviour.

This study brings a new focus to ASC studies. It is the first to investigate international PGT students' ASC via the academic activities required for PGT level study, rather than a specific subject such as maths. It will also differ from other research with the addition of qualitative data and related analysis, which has featured little in previous research into ASC, a gap identified by Byrne (2002). Another unique feature of this thesis is the longitudinal nature which spans two and a half years of data collection. This provides a much longer time span of investigation compared to the few studies into ASC in a HE context, which may shed better light on how ASC changes over time.

1.4. Development of the research questions aims and objectives.

The research seeks to investigate the experiences of international PGT students in relation to their PGT study in a UK HEI, through the lens of ASC. It uses an emergent grounded theory approach to the data analysis.

The main research question is:

To what extent does the Academic Self-concept affect the experiences of a group of international postgraduate students studying at a UK HEI?

The subsidiary questions are:

- What experiences of being an international student demonstrate the participants' ASC?
- Does the participants' ASC change over the duration of their courses? If so, how, and why?
- Is there a correlation between the participants' ASC and confidence (self-belief), and ASC and success (achievement), and if so, what is it?
- What does this mean for the support offered to these international PGT students for their UK HEI and for UK HEIs more generally?

1.5. Thesis structure

1.5.1 The literature review (Chapter Two)

The thesis begins with a review of the literature, providing an overview of the challenges faced by higher education institutions in the UK and the importance of the growing numbers of international students including the benefits they bring to university communities. There is consideration of the different research into international students in HE, particularly their transition to higher level study. This includes a discussion of the various problems attributed to them in the research with claims of deficiency and how there have been a few attempts to counter these claims. It considers the consistent recommendations made in attempts to find appropriate measures of support for international students. The focus then moves to international students' sense of self and how this has not been a feature of the research into international students in relation to their academic activities. The origin of Academic Self-concept is explored, along with additional models that have emerged from years of on-going research into the concept. These include the Reciprocal Effects Model (REM) (Marsh & Craven, 2006), the Internal/external (I/E) Model (Marsh, 1986), and the Big-Fish-Little-Pond Effect (BFLPE) Model (Marsh, 1987). Combinations of these models are also discussed, including the Reciprocal Internal/external model (RI/EM) (Marsh & Köller, 2004). It continues by discussing the research into international students' experience in HE, which uses the different ASC models and their findings. Finally, it considers how the concept can be used to investigate PGT students in the UK and its potential limitation.

1.5.2. Methodology (Chapter Three)

The methodology chapter presents a consideration of the philosophical underpinnings for the research and the foundations of the research design. It explores the contrasting worldviews associated with quantitative and qualitative investigation and the implications for research when they are combined, with the use of an emergent grounded theory as a means for analysing the data. It provides the context and setting of the research. This is followed by the evolution of the research instruments and the creation of self-descriptive questionnaires (SDQs) and semi-structured interview questions and their possible limitations. The ethical considerations are discussed, along with the pilot study used to test the recruitment process and the suitability of the research tools. The main data collection process is presented in detail, including the timings of the data collection, an overview of the participants, and problems with participant drop out. The method of data analysis is described, along with the issues and limitations it raised. There is a discussion and consideration of the validity and reliability of the research using a combination of different types of data.

1.5.3 The findings: the self-descriptive questionnaires (Chapter Four)

The first findings chapter considers the data from the self-descriptive questionnaires. It was collected in three waves as planned in the design of the research, spanning the entire length of the participants' PGT programmes of study. The data discussed comprises the dominant emergent themes from within the findings which contributed to answering the research questions. Questionnaire data provided triangulation of the findings for the semi-structured interview data.

The chapter begins with details of the self-descriptive questionnaire participants and their programmes of study. It then focuses on the first wave of collected data beginning with the types of academic activities required on the participants UG courses, and how these academic activities differed to what they perceived they needed at PGT level. It considers how much knowledge they have of the type of academic activities required to study at PGT level, and how they perceive themselves in comparison to others, social comparison, which features in previous research into Academic Self-concept. These two sections include the data from all the wave one participants' responses. The rest of the chapter then continues with consideration of the results of the thirteen participants who completed all three self-descriptive questionnaires, looking at each wave of data separately. It investigates their perceived levels of knowledge, capability, and confidence

to complete the academic activities listed. The questions are repeated over the three waves of data collection to enable changes in responses to be tracked, which demonstrates change in levels of ASC.

1.5.4. The findings: the semi-structured interview participants (Chapter Five)

The second findings chapter concerns the responses in the data related to the semi-structured interview participants. The interviews were conducted following each self-descriptive questionnaire in all three waves with a total of eight participants. These were analysed via thematic coding using an emergent grounded theory.

The chapter begins with an overview of the participants, analysis began in a similar way to the self-descriptive questionnaire data, considering the differences between UG and PGT study, and the expectations the participants had. It then examines how the participants formed strategies to cope with the work required. Evidence of changes in relation to knowledge of what was required of them at PGT level was considered with an analysis of the related self-descriptive questionnaire data for the individual interview participants. This was followed by a discussion of their creation of support structures to assist them with what they were required to complete, and then their perceptions and revelations, including potentially adverse behaviour, which was seen when they were required to work in groups. This is accompanied by the perception they had of some of their peers. The impact of feedback and grades is examined, and the changes to levels of confidence over the duration of their studies. It considers issues of feelings of lack of ability, and how the participants perceived they appeared to others and the impact this had. The participants' definitions of success and achievement are discussed, as well as their aims for completing the course.

1.5.5. Discussion (Chapter Six)

The discussion chapter combines the findings in the data chapters and the literature to discuss in more depth the emergent themes from the data. They are considered initially using two perspectives, evidence that can be seen externally, and then internal reflections, usually unseen by others and only available with enquiry. The external elements include comparison of UG and PGT level study; the creation of support structures; strategic approaches to academic work; responses to groupwork; and the receipt of feedback and grades from tutors. The internal aspects include changes in levels of knowledge and confidence, negative sense of self, changes in strategy, and reflections

on achievement and success. Finally, it discusses the implications of the findings for the higher education institution and higher education institutions in general.

1.5.6. Conclusion (Chapter Seven)

The final chapter provides a final answer to the research question. It states how the research contributes to knowledge, and the limitations of the research. It provides recommendations for consideration and for potential policy review or creation, and the final closing summary.

1.6. Chapter summary

This chapter has presented the context and rationale for the research. It has provided an overview of the contents of the chapters. The thesis seeks to make recommendations for working with international PGT students which will require a thoughtful consideration of current practice. The next chapter examines the literature.

Chapter Two: The Literature Review

2.1. Introduction

The literature review explores some of the challenges UK universities are currently facing, which has led to the increased importance of attracting international students into UK HE. It presents a background and context to this, and reasons for the growing numbers, and the benefits increased numbers of international students are thought to bring to HE communities. It will focus on the research that has been conducted in relation to international students arriving to study in a new country, and the issues they are thought to face. Literature that raises concerns about international students' preparedness to study and how this has been challenged will be discussed, alongside attitudes towards international students, and how consistent recommendations regarding support for them seem to be on repeat with little effect. A different approach to considering the experiences of international students is suggested that uses the lens of 'Academic Self-concept' (ASC), which comes from the field of psychology. This will be discussed, along with other models examining aspects of ASC that were developed independently, and combinations of them, examined in the literature. Their application for investigative use will be reviewed. The key themes examined by ASC researchers and the limitations of the previous research utilising the concept provide the grounding for this project, which takes a unique and alternative route to understanding the experiences of international postgraduate students over the duration of their programmes of study.

2.2. UK Higher Education

This section will consider the importance of international students for UK HE institutions. It will discuss the rise in international student numbers and the benefits the students bring to the whole academic community in which they choose to study. Additionally, it will highlight some of the challenges institutions face, which further emphasises the importance of international students to the UK.

2.2.1. The importance of international students to universities

Over the last couple of decades, the number of international students who arrive in the UK to study a variety of courses each year has been increasing. This includes study on foundation years, undergraduate (UG) and postgraduate (PGT) programmes. According to Walker (2014:325) "The internationalization of tertiary education has given rise to student mobility of industrial proportions and affects and is affected by national

economies." The rush to attract international students is a global phenomenon and British universities are host to the second highest number of international students in the world behind the United States. The UK government has an aim to increase the number of international students in higher education to 600,000 per year by 2030 (https://www.gov.uk/government/publications/international-education-strategy-2021-update/international-education-strategy-2021-update-supporting-recovery-driving-growth Last accessed 15/08/2023.) According to the latest figures available, there was a total number of 2,751,865 students studying in HE in 2020/21 (see https://www.hesa.ac.uk/news/25-01-2022/sb262-higher-education-student-statistics/numbers Last accessed 15/08/2023.) Out of this total, 605,130 were non-UK students, 152,905 were from the EU and 452,225 were non-EU. This was an increase of 48,505 international students from 2019/20, comprising mostly people who were non-EU residents.

The EU country which sent the most students to study in the UK in 2020/2021 was Italy, followed by France and then Romania. China sent the most non-EU students comprising 32% of the total for non-EU enrolments. This figure has increased by 50% since 2016/17. India has seen a recent increase in students studying in the UK, with very large intakes in 2019/20 and 2020/21, which represented 19% of the overall non-EU student intake. Students from Nigeria were the third most numerous group outside of non-EU students. The total number of postgraduate taught students in the UK 2020/21 was 628,940. This included 31,045 EU students and 212,515 non-EU students. (All figures taken from https://www.hesa.ac.uk/news/25-01-2022/sb262-higher-education-student-statistics/numbers Last accessed 15/08/2023.)

These high numbers are the consequence of a clear increase in the number of students from overseas arriving to study in the UK. The table below (Table 2.1.) shows the upward movement in numbers for all international students since 2016/17.

Table 2. 1 The increase in the number of overseas students in the UK from 2016 to 2021

	2016/17	**2017/18**	**2018/19**	**2019/20**	**2021/22**
Other EU	138,040	142,860	146,585	147,800	152,905
Non-EU	312,795	326,345	349,370	408,825	452,225
Total Non-UK	450,835	469,205	496,315	556,625	605,130

(Source: https://www.hesa.ac.uk/data-and-analysis/sb262/figure-9 Last accessed 15/08/2023.)

With this increasing number of international students, comes an increasing demand to ensure that they have what they need, to enable them to succeed.

2.2.2. Benefits of studying in the UK for international students

A qualification from an English-speaking country, as discussed by Morgan (2014), can boost a student's standing in their countries and communities. It can provide them with better employment prospects, with an altered perspective of themselves and their home country. Morgan (2014), writing about the possible reason for growth in PGT student numbers, confirms that a further qualification can help people "stand out from the crowd" (2014:1159) and provide the possibility for larger salaries in future employment.

Studying in the UK can offer a further benefit described by Lillyman & Bennett (2014). They suggest that international students can develop as a "global graduate." They can take what they have learned home to perhaps "make a difference in their own country" (2014:71) upon their return.

Another benefit, not only for the students, but in terms of the wider global community, may be an opportunity to promote better international relations. MacDonald (2014: 63) states: "International study can give students from countries which have difficult 'official' relations the chance to meet on a neutral territory and break down barriers, at least at a local level and on a one-to-one basis." Although, this may be the hope of those observing from the outside which could possibly contrast with those people in the UK from conflicting countries.

Additionally, studying at a UK HEI, for some, may provide an opportunity that may not be open to them in their home country. According to Walker (2014) some students come to study in the UK, as they may be denied access to higher education in their home countries to study for a degree, or higher award.

Therefore, international students may choose to study in the UK for a variety of reasons, which as well as benefiting them as individuals, may also help towards improving their communities, and even international relations. They potentially have much to gain from the experience. Thus, making studying in the UK a potentially attractive and beneficial prospect for many international students who choose to embark on a course of university study.

2.2.3. Benefits to home students

The increase in international students is also said to expand UK students' horizons, with the opportunity for more intercultural and diverse educational experiences. International students bring a rich cultural diversity to university campuses. Home students would perhaps struggle to find an equivalent international experience elsewhere. Lillyman & Bennett (2014: 71) support this, commenting about the benefits international students can bring to home students, stating that they provide, "... a richer learning environment for the home student… through the sharing of knowledge, cultural understanding and engaging in joint research and development." This is an opinion shared by McDonald (2014:62) who describes the benefits international students bring, other than financial, stating, "they enrich the university's population, bringing diversity of ideas, cultural and educational experiences." It is possibly the hope of institutions that having international students on campus, raises cross-cultural awareness for both home and international students. The QAA (2015:1) further supports the words of MacDonald (2014) and states international students "can contribute to the development of intercultural competencies among the whole student body, as well as that of academic and support staff, and can help create intercultural environments that enable all staff, students and providers to broaden their perspectives." International students, it is argued, can provide the opportunity for home students (and university staff) to seek out commonality, rather than constantly dwelling on differences, to better understand the world and the interconnections that exist within these experiences.

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2.2.4. Further reasons to grow international student numbers.

Despite the growing numbers of international students and the rich diversity they bring, universities have been experiencing many challenges and uncertainties in the last few years. Institutions were waiting for the completion of the Augur Report, commissioned by the UK Government in 2018, which aimed to review the funding of post-18 education. A further issue has been the requirement for institutions to increase pension contributions for staff, for which resources need to be allocated. There was also the advent of Brexit, which saw the UK leave the European Union, and enter a new environment for student recruitment (and research partnerships). Then there was the sudden emergence of the global coronavirus pandemic, which brought unexpected challenges, and required an almost overnight change to the means of delivering teaching, from face to face to online provision.

Faced with numerous challenges, many of which affect university income and finance, international students are a valuable commodity as they bring in higher fees per person than home students. Fees for UG home students are currently frozen at £9,250 until 2024-25. The UG home student fees are currently worth much less in economic terms than when they were first set at that level in 2017. (Available at: https://www.theguardian.com/education/2022/jun/29/uk-universities-warn-tuition-fee-crisis-could-mean-home-student-cutbacks Last accessed 29/05/2023). In contrast, according to Murray (2021), the average cost of tuition fees for international students ranges from £10,000 to £20,000 per year for UG courses, and £12,000 to £20,000 for PGT courses, while the cost can be as high as £64,652 per annum for a UG medical course and up to £59,490 for an MBA. There are currently no caps on what universities can charge international students.

The income international students bring to the UK is worth billions of pounds to the economy. According to HEPI's (2023) report on the benefits and costs of international students in UK HE, in 2020/2, they contributed £41.9 billion net economic benefit, with every eleven non-EU students contributing a net economic benefit of £1 million to the UK economy during the duration of their studies. (Available at: https://www.hepi.ac.uk/wp-content/uploads/2023/05/Full-Report-Benefits-and-costs-of-international-students.pdf Last accessed 29/05/2023). However, with the change of status for EU students to international, they are now subject to the higher fees and may choose to study in the EU where it will be much cheaper, which will be both a financial loss and a loss of student diversity for universities. Therefore, more non- EU students may be offered more places to boost student numbers, which appears to be an aim of the Government, as discussed above.

2.2.5. Summary

International students are thought to bring richness and diversity to UK HEIs. They are said to provide opportunities for all who work and study in HE, contributing to learning more than a UK centric perspective on the world. They have the potential to impact the people they are connected to at home and in the UK, which in a broader sense may promote better global relations. Alongside the benefits they bring to university communities, international students help enormously with the growing financial

uncertainties facing the UK HE sector. It is important therefore, that universities offer them a useful and fulfilling academic learning experience.

2.3. Research into international student experiences of higher education

Despite the growth in international student numbers in the UK, research that has been conducted often focuses on a particular nationality, or participants studying in one subject area. There are few which focus on mixed cohorts of students, studying multiple subjects in the UK. The research that has been conducted in the area, has focused on a variety of topics regarding the experiences of international students at UK HEIs. Recent examples include their transition to university, (Evans et al., 2018); the challenges international students face (Adisa et al., 2019); engagement and sense of belonging (Igwe et al., 2020); international student support, (Coneyworth et al., 2020); feedback (Rovagnati et al., 2022), international student networks (Nashrawan & Cox, 2016), and academics perspectives of internationals students and their opinion of students' perceived deficit (Jabbar et al., (2020). As we shall see, despite links to the student experiences, what is not studied is how they perceive themselves in relation to the academic work they are required to complete.

2.3.1. International student transition

Many different issues have been identified relating to student transition. In this context, transition denotes the change or move from one academic setting to another, such as school to university, or moving from undergraduate to postgraduate level study. These issues include culture shock, adaption to the unfamiliar environment, language ability, intercultural communication, issues with socialising, loneliness, academic performance, and knowledge of academic conventions, among other issues.

As noted above, adaption was a key theme in the transition literature. Young & Schartner (2014) examined international PGT students' 'adjustment' and 'adaption' to studying at a UK university through a program of cross-cultural communication. The students were from the same academic discipline in humanities. They found a similar list of issues their students raised as above, including language ability which was linked to their academic performance, concerns about written work and group presentations, self-directed study; classroom interaction and the 'international' study environment...' (2014:599) which was said to be 'mostly devoid of host country students' (ibid.). Additionally, they asserted: '...there is no such thing as an international student experience', each person's experience was individual to themselves (2014:560). Similarly, Coneyworth et al. (2020)

in their study of PGT students in HE and the use of a PGT support programme, found issues of adjustment and acculturation for many students transitioning to a higher level of study. Likewise, Evans et al. (2018) in their investigation of transition from UG to PGT study, found initial struggles with academic demands. While Menzies et al. (2015), examining international PGT student transition in Australia, discovered that students had difficulties with the different study requirements, loneliness, making friends and finding accommodation. A further study by Menzies & Baron, (2014), examining international PGT student transition experiences, considered the importance of friendships and membership of student societies. They found students had negative experiences in the beginning but adjusted over time. In another study based in a UK university, Quan et al. (2013) investigated the transition experiences of international students entering the final year of study at a UK university. They also identified that the students had language issues, which they resolved by using existing friendship networks for support. The literature is demonstrating that international students need to and are finding ways to become acquainted with the requirements of studying in a different country, many finding that there were alternative requirements to what they have been used to, or with which they were familiar.

Ridley (2004) discusses the different discourses with which non-traditional and international students need to become familiar. She interviewed tutors and students to assess the gap in knowledge and expectations of a UK university in terms of assignment writing. She sums up what could potentially be the experience of international students entering higher education in the UK:

> When students cross the threshold of any university in the world for the first time, they enter an unfamiliar domain, a domain that will make demands on them like they have not experienced before. Each discipline, course and module within a university will have its own discourse and different students will become integrated to a greater or lesser extent into the ways of their respective fields of study. (2004: 91)

With a slightly different focus, Brown & Brown (2013) examined the identity conflict of five international postgraduate students studying in the UK. It was a qualitative study. It provides an extension to Ridley's view above and suggests moving to a new environment can be a "traumatic life event" due to the number of changes people experience. This can be termed a 'culture shock', as highlighted earlier. Culture shock was defined by Brown and Holloway (2008:33) as "commonly understood as anxiety that results from losing the

familiar signs and symbols of social intercourse, and their substitution by other cures that are strange". This suggests that what they were used to in their home countries, ways of communicating, their way of being and understanding is replaced by the new and unfamiliar. Brown & Brown (2013) found that challenges to one's cultural identity by having to conform to the new culture of the country of study can be 'profoundly disturbing' for some individuals experiencing life as an international student.

Research over the years has therefore identified many issues international students appear to face. These include issue with knowledge of the academic activities required on their courses, which will be discussed next.

2.3.2. International students' lack of study skills and deficiency claims

As highlighted above, many international students arrive with gaps in their knowledge and familiarity of some of the requirements of academic study in the UK. It is possibly assumed by UK HEIs, as a postgraduate, students have already demonstrated the necessary accomplishments of academic study by obtaining a first degree. O' Donnell et al. (2009: 31) deny this notion and state that having studied a UG course does not, in fact, equip students with the necessary skills for a PGT programme stating:

> inaccurate assumptions may arise from the idea that having an undergraduate degree means that students are skilled in the practices necessary for success in higher education, and thus that there is little (if any) further transition to be made by that stage.

Students are reported to experience problems with the change to studying at PGT level. O' Donnell et al. (2009) suggests that:

> ...difficulties in the transition to postgraduate study were experienced as difficulties in the mastery of key skills or academic practices, suggesting that postgraduate students do not come "equipped' for their studies in higher education. (2009:31)

Additionally, Hennerby et al. (2012) examined the linguistic capabilities of international postgraduate students and found that despite the students meeting the entry requirements of the course, they still had difficulties in all four language skills (these are reading, writing, listening, and speaking) specifically the oral interaction required in seminars. There is evidence that PGT students are believed to be ill equipped to progress

smoothly without issue to PGT level study, which leads to accusations of student deficiencies. These are discussed further below.

2.3.3. The deficiency opinions of some academic staff

There is a widely held belief by some lecturers teaching at universities that international students need 'fixing' as they are somehow 'broken' or 'incapable'. This is implied above by O'Donnell et al. (2009) and Hennerby et al. (2012). McKay et al. (2018) state that "Rather than being recognised for their valuable insights and experience students are often seen as 'special needs' with limited academic literacies and an assured range of difficulties…" (2018;278). Dimmock et al. (2019) investigated international PGT students in Australia from the teachers' perspective. Among their findings was that students were considered deficient in the skills required at master's level. Skyrme & McGee's (2016) research also identifies the deficit thinking, (which relates to a perceived noticeable difference in international student capabilities compared to local students), of academic staff towards international students, this time in New Zealand. They suggest that students have some sort of deficiency that needs fixing or addressing in some way and that this additional support takes focus from others including home students which may be unfair. Jabbar et al. (2020) also examined academics' perspectives of the international students they teach in the UK. The findings highlight the lack of patience with the students' perceived deficits or any interest in their previous experiences, which if explored and understood in more detail, may contribute to providing them with a better learning and teaching experience. Jabbar et al (2020:357) stated that the view of student deficit "may become a self-fulfilling prophecy, with international students increasingly feeling disconnected from the teaching and learning experience."

2.3.4. Challenges to a 'student deficit' perspective.

There have been attempts to counter the deficit opinions of international students. A study by Rear (2017) tested the belief that east Asian students had a deficit and lacked critical thinking skills due to their previous educational background. He examined this with Japanese students comparing a critical thinking skills task performed by the students in English and in Japanese. The findings suggested that students did have some difficulty composing arguments in their second language (English) but not because they had a deficit and lacked critical thinking skills. In Japanese, they demonstrated their abilities in critical thinking skills. The difficulty of producing critical thinking skills in a second language was attributed in part to "cognitive overload" (Rear, 2017: 14) This is said to

relate to the area of the brain where working memory, for using a second language and critical thinking skills both reside, thereby, making it more of a challenge to do both well simultaneously. This is one challenge to the assumption that previous educational background is to blame for groups of students appearing to lack the necessary critical thinking skills.

Straker (2016) in his review of the literature in relation to international students' participation in HE, also challenged the idea of international student deficit by attempting to reframe how they are seen. He thought the way they are currently viewed as "international students" was unhelpful as it emphasizes their differences and leads to a "deficit discourse". He suggests that viewing them through a different lens based on participation in sessions, and providing better guidance, would allow "issues" international students are thought to face to be viewed in a "broader context", rather than a focus on them as international students who do not meet institutions' expectations of participation.

International students have been shown in the literature to face identified "issues" in HE, as seen above. Assumptions are being made about them on little actual evidence of understanding their international student experience of studying as an international student, and the reasons behind why they might be experiencing some difficulties or perceived lack of skills.

2.3.5. Student coping strategies

It is thought by some researchers that to cope with change, students tend to rely on what has worked for them in the past. Kaufold (2015) in her research into European postgraduate students and their academic writing, found that students often draw on their previous experiences. Carroll and Ryan (2005) discussed this also in relation to learning a new game, stating, "some may not realise the rules have changed and most will start using behaviours and assumptions that have served them well as learners to this point" (2005: 26). Therefore, moving to study in the UK can prove challenging for all students at all levels.

Other methods of coping identified in the literature include the creation of networks of support. Evans et al. (2018) investigated PGT Business Management students in the UK (not only international students). They attempted to discover how students managed the transition from undergraduate to postgraduate study. They found among other things that students use informal networks of support, which comprised peers who the students

thought could assist them, as opposed to the formal university offered support. Nashrawan & Cox (2016) who were specifically investigating international student networks in the UK, found multiple identifiable networks which changed over time. The networks were often built on sharing a common language, culture or programme, and commitment to study. Another study by Quan et al. (2013) as seen above, found that many students used their existing friendship networks to help them cope with what was required of them.

2.3.6. Attempts to support student transition.

Most of the research into international student transition makes suggestions for changes to the way they are supported. An example of support, which was also an attempt to challenge the idea of student deficit was by McKay et al. (2018). They created a transition scheme called "CAKES (Cultural Awareness and Knowledge Exchange Scheme)" to try to help international students with their transition to academic study skills and sociocultural activities. The researchers ran a series of weekly lunchtime workshops and provided real cakes to eat, which they also used as an aid to teach and as a metaphor for cultural identity. The weekly sessions were themed with topics such as language, cuisine, and education, and both staff and students shared their stories about their experiences in relation to the topics. The sessions were designed with the aim of using a non-deficit approach by helping students better understand the difference between their previous study and their current programme. They stated "… students were assisted with decoding the educational culture...which valued the diverse skills and the attributes they had to offer "(2018:285). It demonstrated that "international students are highly capable of adapting to new ways of learning if they know what is expected of them." (2018:285).

Other examples of support to aid in transition are Coates & Dickson (2012) who implemented an extensive induction, discussing expectations and types of skills required with on-going yearlong support and practice group work opportunities. Additionally, Coneyworth et al. (2020) created a PGT student support programme to run all year, not just at induction. It was aimed at assisting students with transition to study at PGT level.

A different example that some researchers into international student experiences have investigated is the use of feedback as a means of support. Igwe et al. (2020) in their examination of what engages international students found that quality of tutor feedback was key to international students' 'sense of belonging' and integration. Rovagnati et al. (2022) considered feedback literacy of international PGT students and found that they

"...had diverse undergraduate histories of assessment and feedback, and previously developed different feedback literacies." (2022: 355). Rovagnati et al. suggested that this may prevent students from recognising how to "utilise feedback as a tool for ongoing learning and development in the new environment." (ibid.). These findings suggest that PGT students need guidance on making the most of their learning experiences including the use of feedback.

There are calls and suggestions for change to the support offered to international students reflected throughout the literature which spans many years. Adisa et al. (2019) suggested a mentoring programme to assist with student transition; Evans et al. (2018) proposed pre-course preparation and on-going structured support; Jabbar et al. (2020) thought better support for integration was required; Hennerby et al. (2014) suggested the need for further support of students and additional research due to the students difficulties with language and oral interaction in seminars; Menzies & Baron (2014) like Adisa et al. (2019) suggested a mentoring programme but to help combat reported student loneliness; Pike & Harrison (2011) expressed the need for more support for student transition and a review of policies and strategies to accomplish this; Quan et al. (2013) asserted that additional support was provided prior to the students' transition.

Resolutions to the ongoing issues of international student support and understanding international students' transition and studying in the UK is still found wanting. Much research has been used as attempts to understand what the students struggle with and what they can and cannot do. There is a distinct lack of consideration of their conscious 'being', and why they may not be up to speed on what is required, how they respond to the situation they find themselves in, and how this manifests itself.

2.4. A gap in the research

The on-going research into PGT students' experiences covers a variety of issues. However, in the literature, as referred to above, there seems to be little on international students' sense of themselves in relation to the activities that they are required to be familiar with at a postgraduate level. Although McKay et al. (2018) did attempt to understand their international students more clearly, students' sense of academic-self (see below for further discussion) and how they understand what is required of them as a PGT student, is lacking in the literature.

This lack of knowledge of PGT students' individual experience, may account for the belief by some, that students need 'fixing', as there is not a clear understanding by those who work with international students of the students' experience of 'being' an international PGT student. Research that focuses on their sense of academic self may reveal more about the challenges international PGT students face, including how students approach the academic work that is required of them to complete their courses of study. It may also be possible to establish what they see as important within this context and what they rely upon to navigate their way to the end of their programmes.

Postgraduate study is not just something that happens to students, it is a choice they have made. In some instances, PGT student experiences are presented as though it is something they endure, or institutions have environments that are challenging or not international student friendly enough and therefore they need additional support and guidance, rather than recognising that this experience is something they actively decided to undertake. Most researchers try to identify and find solutions to problems and may recommend changes in policy to assist with the issues international students face, as seen in the examples above. The question that may be of benefit to all stakeholders is where the students sit in relation to this maelstrom of student-ness based on what is required of a PGT student. There is a lack of representation in the research into international student experiences of studying at PGT level, of their individual thoughts, and where they sit in relation to them. Most research relates to students' 'doing', or their perceived lack of doing, rather than their 'being' in the experience. A lens to use to investigate PGT students' experiences of academic-self needed to be found.

2.4.1. 'Self' as a concept

Consideration and theories of 'self' have been ongoing for hundreds of years, the Westerns theories of 'self,' stretch back to Plato (429-347) BCE (Barresi & Martin in Gallager 2011). Self-concept, however, is relatively more recent, dating to the mid eighteenth century (see Barresi & Martin in Gallager 2011). In more recent times, in education contexts, there have been studies which aimed to examine 'self' in relation to understanding student experience.

Mercer in her interesting research has investigated different ways 'self' has been considered and the range of terminology used to convey different aspects of self. Her research concerned 'self' in relation to second language acquisition (see Mercer & Williams, 2014; Mercer, 2011; Mercer & Ryan, 2016). Mercer & Ryan (2016) suggest 'self' is complex, holistic and dynamic in comparison to more linear models that are depicted in relation to self-efficacy and self-concept, but these two concepts provide a means to examine and potentially predict behaviour in academic settings, whereas Mercer's complexity theory does not provide a means with which to establish aspects of academic self-concept. She describes 'the self' as a complicated amalgam of emotions, motivations and experiences which change and oscillate and as such would be difficult to decipher very clearly, which is why there needs to be a lens and a means to investigate lived experience. Despite Mercer's (2014) recommendation that there is a need to view 'self' more holistically, she also admits that this does not provide an achievable way to research it, stating "The impossibility of the task becomes apparent ... (Mercer & Williams 2014:173) Therefore, this research needed to establish a concept which would provide a means of examining self in an academic setting to identify students experiences in an attempt to discover their perceived reality. This led to a couple of potential concepts as mentioned above academic self-efficacy and academic self-concept.

Academic self-efficacy (see Lent, Brown & Gove, 1997; Bong & Skaalvik, 2003; Ferla, Valcke & Cai (2009) Komarraju & Nadler, 2013) derives from Bandura's (1977) larger construct of Social Cognitive Theory. It is defined by Bandura (1977: 3) as follows:

> Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments...Such beliefs influence the course of action people choose to pursue, how much effort they put forth in given endeavours, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether they thought the patterns are self-hindering, or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of accomplishments they realize.

This concept at first seems a plausible lens for investigating the PGT students' academic experiences. However, it may be lacking certain aspects that other concepts such as Academic self-concept (ASC) may provide. Bong & Skaalvik (2003) compare the two concepts to determine how different they are. They also discuss the many similarities,

but how they are researched in different ways. Both use self-report measures, usually in the form of self-assessment surveys. Self-concept researchers often use hypothetical descriptions in their research on young children to ascertain which description the children think matches them best. Whereas self-efficacy researchers present problems which are similar to problems the participants may face. They then must estimate their level of confidence to solve the given problems correctly. Both constructs require self-assessment of perceived competence in a domain or specific activity that is being investigated. ASC includes the element of social comparison which ASE does not. A further key difference is that ASC considers emotional and motivational factors as a reflection of self-image, which is included in the construct, but ASE views these differently, more because of ASE but not an integral necessity of defining a person's ASE.

Wu et al. (2021) in their research on ASC and achievement suggest there are three key differences between ASC & ASE. Firstly, perception of ASC includes consideration of past accomplishments and circumstances, this contrasts with ASE and the consideration of confidence in coping with task completion in an academic setting. Secondly, there are two components of ASC, the cognitive, which is the part which concerns self-perceived competence in academic ability, and affective, which considers how interested a person may be in what they are trying to achieve. ASE is said to only consider the cognitive element. In a similar way to Bong & Skaalvik above, Wu et al., claim that the way they evaluate their findings differs, ASC is said to be more influenced by social and dimensional comparisons, but ASE is more concerned with comparison of previous experience of a similar task.

2.4.2. Why academic self-concept is the best fit

This research has chosen to use the lens of ASC rather than ASE as ASC allows for broader self-perception, which includes comparison to others and to self-perception of self to different domains including past experience and to how people feel about themselves in relation to what is required of them academically. ASE seems to be solely related to specific tasks and one's confidence in completing them, without consideration of other elements of self-perception, which may influence self-beliefs about the completion of the task. The next section provides more detail of ASC.

2.5. Academic Self-concept

Academic Self-concept (ASC) (Marsh et al., 1988) is a concept that relates to a person’s self-perception of their abilities in relation to their skills and achievements in an academic

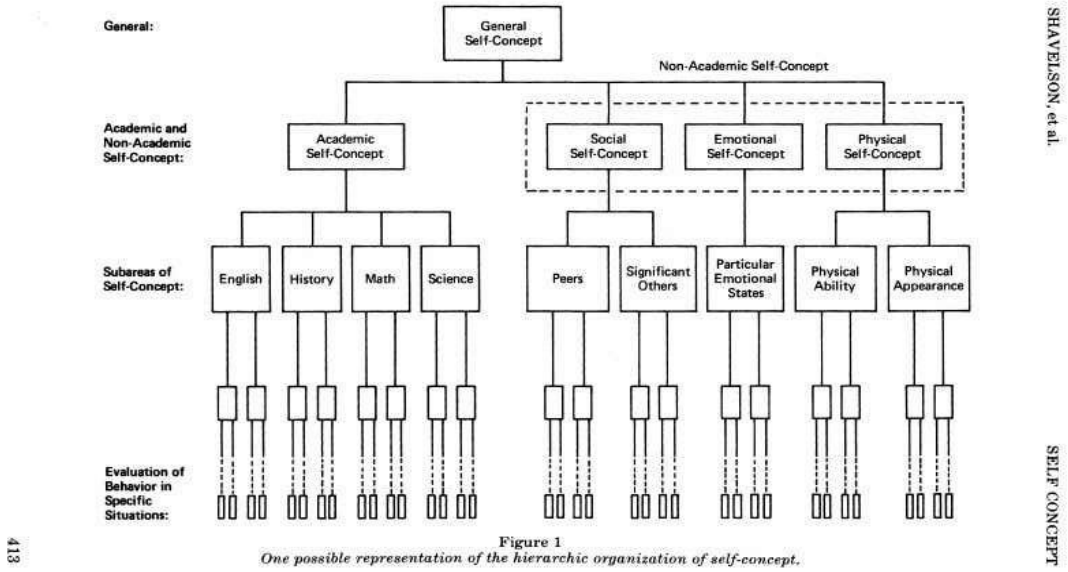
area, also known as a “domain”. Examples of domains are academic subjects such as mathematics and English.

ASC seems to have been defined consistently over the years by various researchers including Bong & Skaalvik (2003); Van Soom & Donche (2014) and Sticca et al., (2017). An often-cited definition is by Lent, Brown & Gore (1997:308): “Academic Self-concept is commonly viewed as incorporating “attitudes, feelings and perceptions” relative to one’s intellectual or academic skills. As such it represents a mixture of self-beliefs and self-feelings regarding general academic functioning.” Other definitions include Erten & Burden (2014:392) “self-concept, often referred to as personal perceptions of one’s own academic abilities or skills that are developed through experience with interpreting the learning environment”; Curtin et al. (2013:114): “Academic Self-concept consists of the beliefs, attitudes, and self-perceptions that students have about their academic competence and performance”; Becker & Neumann (2018:883) add to the definition stating“...ASC, ... can be defined as a person’s cognitive structures and perceptions regarding his or her own abilities and achievements in academic domains”. The most recent is by Van der Westhuizen et al., (2022) who describes ASC as “the formation of students subjective beliefs about their abilities in different academic domains”. Therefore, ASC concerns the self-perception, attitudes, and beliefs of an individual in relation to their capability and performance in an academic domain.

2.5.1. The origins of Academic Self-concept

ASC is part of a larger general self-concept framework. This construct was as derived by Shavelson, Hubner & Staton (1976) based on an earlier version by Shavelson.

Figure 2.1: General Self-concept framework taken from Shavelson et. al (1976:4)



According to Marsh et al. (2016:1273), general self-concept, one of the oldest concepts in psychology, relates to how a person perceives themselves usually in relation to four areas of self, which are academic, social, emotional, and physical as shown in Figure 2.1 above. In addition, Byrne (2002: 896) defines it:

> The study of [general] self-concept has a long history in the field of social science research. Its longevity likely derives from the widely held notion that self-concept not only is a desirable outcome in many psychological and educational situations but is also often posited as a mediating variable that facilitates the attainment of other desired outcomes such as academic performance and social competence.

Shavelson et al. (1976) also define the General Self-concept:

> In very broad terms, self-concept is a person's perception of himself [sic]…We do not claim an entity within a person called "self-concept." Rather, we claim that the construct is potentially important and useful in explaining and predicting how one acts. One's perception of himself [sic] are thought to influence the ways in which he acts and his acts in turn influence the ways in which he perceives himself… (1976:411)

The concept is thus a means by which researchers can attempt to identify a person's perception of themselves in relation to the different areas, social, emotional, physical,

and academic. It may also be used to try to predict and explain behaviour and examine how this self-perception may change or influence the way a person acts. For example, if a person perceives that something is achievable, they are more likely to achieve it. This could relate to social, academic, physical, or emotional aspects of the model. It is therefore a tool through which researchers can consider aspects of an individual's self-perception, and it is also something identifiable, as a thing, that people possess, found because of their self-perception. If an individual's self-perception is identifiable, it links to them having self-concept, although, according to Shavelson et al. (1976) above, it is not an 'entity' within. It could therefore be described as an understanding or recognition of self in relation to the four concepts depicted in the model, but probably only when one is prompted to reflect on an aspect of self, such as perceptions of self in relation to perceived ability in mathematics or languages.

2.5.2. The General Self-concept framework

The framework, seen above (Figure 1) is divided into two distinct parts, academic and non-academic. These in turn are further divided, the non-academic comprising social, emotional, and physical factors, which in turn are further sub-divided into different facets. The Social Self-concept involves the perceptions of self in relation to the facets of peers and significant others. Emotional Self-concept is the perception of one's own emotional states, which is its only facet, and Physical Self-concept has the facets of a person's self-perception of their physical appearance and their physical ability. According to Bong and Skaalvik (2003:3), "Self-concept is formed through experiences with the environment and is influenced especially by environmental reinforcements and significant others". Therefore, people may judge themselves based on what is going on around them, the way others behave and what they communicate. They may also rely on what they have experienced before.

The Academic Self-concept sits somewhat separate from the other three self-concepts in the model but has sub-areas, which are single academic subjects (facets) such as maths and English (as noted). These specific areas are researched within themselves or in comparison to each other, for example a student could compare their perception of themselves in relation to maths on its own, or alternatively they could compare themselves in relations to maths and English. This is a means by which to understand student behaviour and how this demonstrates their academic self. The model is very linear and compartmentalises each facet area which could be a weakness of the model.

However, it is a basis for exploring self-perception in an academic context that can be used as a catalyst from which to investigate international PGT students' reflections of their academic experiences.

2.5.3. Development of ASC research models

Since the creation of Shavelson's et al. (1976) model above, research into ASC has led to the formulation of many models of ASC, which have been developed in "isolation", according to Kadir et al. (2017), (although this is questionable due to the involvement of Marsh in much of the research over the years). Elements of these models may be useful in exploring and understanding the beliefs and behaviour of international PGT students. These include the Reciprocal Effects Model (REM) by Marsh & Craven (2006), the Internal/external model (I/E Model) by Marsh (1986), and the Big-Fish-Little-Pond Effect Model (BFLPE) created again by Marsh & Parker (1984). There has also been research that combines the different models to develop further insights into ASC. These models will be discussed further below.

2.5.3.1. The Reciprocal Effects Model (REM)

The Reciprocal Effects Model (REM) as discussed by Marsh and Craven (2006) claims, "that Academic Self-concept and achievement are mutually reinforcing, each leading to gains in the other." (2006:133). It is also termed a ""chicken-egg" debate" (2006:147). The question is "whether Academic Self-concept "causes" academic achievement or academic achievement "causes" Academic Self-concept." (ibid.). In other words, if a person feels they are capable, does that lead to achievement, or does achievement lead to a positive Academic Self-concept. A seemingly important factor in this is positive self-belief and how this can have an impact on subsequent performance. They are potentially mutually reinforcing effects, "Academic Self-concept has a positive effect on subsequent performance and... academic achievement has a positive effect on subsequent Academic Self-concept" (2006:158). Marsh and Craven's work was in relation to specific domains which comprised school subjects such as maths and English and was investigated via self-descriptive questionnaire to school age children. This was followed by quantitative analysis from which the researchers drew their conclusions. They also suggested that in practical terms focusing on positive self-belief may be key to improving performance. They suggest that if practitioners try to improve performance without also trying to improve students' self-belief in their capabilities, any gains potentially made are not likely to last.

A decade later, Marsh et al (2016) looked at temporal ordering of achievement combined with academic effort and ASC, using a longitudinal reciprocal effects model (REM) over a specific duration of time, which focused on the "early-to-middle adolescent period" (2016:1274) through the domain of maths. It focused on German secondary school children in different ability schools described as low, medium, and high. The low and medium ability students were expected to enter vocational training, unlike the high ability students, who were expected to attend university. The data was collected across the first four years of study, labelled "waves", which uses a similar longitudinal approach as my research utilises. The purpose of the research was "to test new theoretical predictions about how to break the double-edged sword of effort in relation to ASC" (2016: 1276). The reason it was termed a double-edged sword was because:

> Increased effort and trying hard are seen as leading to academic success, and are valued by teachers, parents, and students themselves. However, effort and trying hard potentially undermine ASC, particularly when followed by failure. (2016:1275).

They found that their research supported previous findings. ASC positively correlated with effort across all waves, which were also indicators of achievement. However, ASC was found to correlate more with test scores and grades than effort. It also found that subsequent effort of students who had low ASC was "consistently negative" across all waves and levels of ability, which contradicts the finding that increased effort leads to academic success. This is clearly not the case for those who fail and are thereby potentially feeling discouraged. They suggested that teachers need to develop the academic skills of their students by nurturing positive ASC and reinforcing the connection between these constructs that high ASC and high effort leads to achievement. Although this may not always be the case, as their research found, and could therefore be problematic if only high achievement leads to positive self-concept and failing leads to continued lack of self-belief.

2.5.3.2. The Internal/External (I/E) Model

Another model of ASC the Internal/External (I/E) model was originally proposed by Marsh in 1986. "It was developed to provide a theoretical rationale for why maths and verbal self-concepts are so distinct" (Marsh & Craven, 2006:139). People are said to see themselves as either a 'verbal' or 'maths' person. This means that a person may perceive themselves as good in either one subject or the other but not usually both (see Marsh et

al., 2015). The model explores the external comparisons of individuals to others in a particular domain (also termed “social comparison” (ibid.)). For example, in the domain of maths, an individual would compare their self-perceived ability in maths to the ability of their peers also in maths. The internal part of the model comprises the individuals’ self-perception of their ability in one domain and compares it to how well they perceive their ability in other domains, perhaps comparing their ability in maths to their ability in English as an example (also termed “dimensional comparison”, Möller et al., 2015). The conclusions the students draw in their comparisons are thought to form the basis for their self-concept in each area, both internal and external as defined above. When there was an external comparison, meaning when peers were studying the same subject or domain, for example maths, the researchers found a correlation in an individual’s self-concept which tended to be positive. However, when there was a cross domain comparison such as English with maths, the self-concept correlation tended to be negative, therefore, being good in one area did not mean that perceived self-belief in ability was directly transferable or assumed. In fact, Marsh et al. (2015:195) in their research on the I/E Framework, examining self-concept and achievement looking across different ages and cultures stated, “being good in one domain undermines self-concept in another domain.” which is described as “paradoxical” by Marsh et al., (ibid.). No clear rationale is given for this paradoxical situation. (Although, it could be explained by Maths and English being at either end of a “theoretical continuum” (Marsh et al., 2015:194), where there is little similarity in the two subjects. The results were found to be different when there were similar types of subjects, such as maths and physics.) This potentially suggests that if a person achieved well in one subject area, it is not a guarantee that this will be the same in another subject area and in fact may lead to a sense of lack in a different domain. This model presents a means by which people can consider where they see themselves in relation to their perceived abilities and across domains, and where they sit in relation to their peers in the same domain. This suggests that there is some kind of system individuals use to compare and rank their perceived ability in each domain against their peers.

2.5.3.3. The Big-Fish-Little-Pond Effect (BFLPE) Model

A third model, the Big-fish-little-pond effect (BFLPE) has been the focus of several studies into students' educational experiences and ASC. It involves social comparison like the I/E Model, but this time specifically related to comparisons between people who perceive themselves to be less able or more able than their peers, usually over time or waves of

data collection, rather than comparison of self-perceived ability across different domains, or subject areas. The model originated in Marsh & Parker's (1984) research, investigating teachers' ratings of student self-concept and academic ability and with test scores. It also considered the self-concept of students in low-socioeconomic and low ability schools in comparison to students at high socioeconomic and high ability schools. They found that students in the low-socioeconomic, low ability schools had higher Academic Self-concept than those at high socioeconomic/high ability schools. The reason why this was the case is not very clear. Marsh (1987) in another investigation stated that the BFLPE is said to occur "when equally able students have lower self-perceived academic study skills and lower Academic Self-concepts when they compare themselves with more able students, and high self-perceived academic study skills and Academic Self-concepts when they compare themselves with less able students" (1987:281). This means that students can feel less able when they think others are better than they are, which results in a negative self-concept, but they can have a positive self-concept when they perceive they have a higher level of ability than their peers. Marsh used data from an old longitudinal quantitative study from the 1960s of a variety of 10th grade boys from different types of schools both public and high schools, some were considered lower-level schools and some higher level, to establish his findings.

A more recent study of BFLPE by Hoferichter et al. (2018) researched social comparison in relation to ASC and BFLPE. The study focused on high-ability 8th grade students in secondary schools in Germany. It considered class level average grades in four academic subjects, which were maths, German, English as a foreign language and biology, and in relation to four facets which were "social, critical, absolute, and individual ASC." (2018:3). They are defined as follows, social ASC concerns individual performance in comparison to the performance of peers, critical ASC is individual performance based on objective criterion, absolute ASC relates to individual performance which is said to be unrelated to internal or external frames of reference, and finally individual ASC which is individual performance compared to past performance. The findings support previous research which found that students with high academic achievement tended to have a high ASC in all aspects they were investigating. These findings, it is suggested, demonstrate that self-concept is developed through interpersonal and social relationships. Therefore, students' social comparison to others is the key to their sense of ASC in establishing where they think they stand as either more able or less able than their peers in particular academic subjects.

Linking back to student transition, Becker & Neumann (2018) examined the BFLPE in relation to the transition of students moving from elementary to secondary school, again in Germany. It was a longitudinal study based on three years which tracked students from the end of grade 6 through to year 9 of their secondary school. The German system of education has schools which place students on different academic tracks. Two tracks were used in their research. These were "Gymnasiums" that prepare students for university entrance, and comprehensive schools, which are for all students. Their findings support previous studies. The self-concept of students on the academic track, who had higher than average achievement (at the Gymnasium) decreased over time, whereas students on the comprehensive track experienced an increase. Thereby demonstrating the consistency in the results of the BFLPE.

This model has the potential to reveal how students compare themselves with others and could offer an opportunity to discover why ASC increases or decreases, which previous research does not seem to address. The use of social comparison can also reveal where students think they fit academically in relation to others.

2.5.4. ACS model integration

In addition to the various models examined and supposedly developed in isolation (see Section 2.5.3. above), there have been attempts to unify the various models to investigate aspects of ASC. These have been combined to broaden the scope of ASC research, or to create further unified methodological frameworks.

2.5.4.1. The Reciprocal Internal/External References (RI/EM) Model

The I/E Model was combined with the REM Model by Marsh & Köller (2004) in their research into the reunification of east and west German schools after the fall of the Berlin wall. It was an attempt to unify the models to utilise the strength of both to examine the relation between Academic Self-concept and achievement. Möller et al. (2011) built on their own previous research to establish if there were subsequent longitudinal effects of the I/E Model and REM combined across domains, potentially questions which could not be answered by the previous models separately. These questions included the possibility of "negative longitudinal effects from achievements on self-concept in non-corresponding domains" (Möller et al., 2011:1317) and "reciprocal cross domain effects from achievements on Academic Self-concepts and from Academic Self-concepts on achievements" (ibid.). In other words, the longer-term effects of achievement in a previous educational setting which involves comparison of achievement in high school to

the new context, such as undergraduate study and the “chicken and egg debate”, whether academic achievement leads to Academic Self-concepts or vice versa but this time across different settings, such as the change from school to university. Möller et al. (2011) investigated German school children transitioning from elementary school to distinct types of secondary schools that exist in the German education system, which is akin to the movement of students from undergraduate to postgraduate study. It was a quantitative investigation of the students ASC across three waves of data collection using students school grades and a self-descriptive questionnaire. Their research supported the validity of the RI/EM (the two models combined) and showed that there were “positive longitudinal effects on grades and ASC and ASCs within domains, and negative effects of grades on subsequent ASC across domains,” (2011:1315-1316). This means that within the same domain overtime the researchers showed that there were positive effects on a students’ grades and Academic Self-concept, but this was not the case when considering different domains over a longer period.

Other studies which consider the RE/IM model were also based in school settings in Germany. The quantitative research findings of Neipel et al. (2014) support those of Möller et al. (2011). Likewise, Möller et al. (2014) used grades and test scores in relation to self-concept using RE/IM and REM and the I/E model separately. They were investigating maths and verbal Academic Self-concepts in secondary schools again in Germany and attempting to test the validity of the three models, which describe the relationship between achievement and Academic Self-concept. This was based on objective test scores and grades which were used as a measure of achievement. They found that prior achievement had a significant effect on subsequent ASC for maths and verbal self-concept, grades for work had more of an impact on student self-belief than test scores, and dimensional comparison across maths and verbal Academic Self-concept could have a negative effect, which is independent of any measure of achievement. This supports the previous findings related to the RI/EM seen above. Interestingly, Möller et al. (2011) thought that students were aware of their “relative standing” (2011:606) within their peer groups based on social comparison related to grades.

The findings are again mostly consistent in research using these combined models. However, they have not been used in a higher education context in the UK, nor has there been any qualitative investigation. This aspect of the ASC lens may be useful for

considering a comparison of the participants academic activities at undergraduate and postgraduate level, and whether there is an impact on their ASC, and what that might be.

2.5.4.2. BFLPE and I/E

A different combination of models was used by Kavangh (2019) utilising the Big-fish-little-pond effect and the Internal/External Model to create a unified framework in her investigation of the ASC of primary school children. The research focused on grade 6 children in relation to reading in Ireland and tested 3 hypotheses. The first concerned the I/E model. The findings support previous research which identified that achievement in one domain was positively related to self-concept in that domain, but negatively correlated with self-concept in a different domain as found in previous research (see Marsh et al., 2015, above).

The second hypothesis was in relation to BFLPE. Kavanagh found that students in higher achieving contexts had lower self-concepts than equally achieving students who were in schools that were considered to be lower achieving.

The final hypotheses combined the two models and reached the same conclusion as the first hypothesis. It confirmed that: “Individual achievement in one domain was significantly positively related to self-concept in that domain, but significantly negatively related to self-concept in the other domain” (ibid.). In addition, BFLPE were found in reading and maths and was found to be larger for maths than for reading.

The findings only drew on one wave of data, which Kavanagh acknowledged was a limitation of the study. Overall, the research provided evidence of social and dimensional comparison which are thought to independently influence students’ Academic Self-concept.

2.5.4.3. I/E, REM & BFLPE

Further to the combination of two models, Marsh et al. (2018) in another collaboration, used a combination of three theoretical ASC models, the I/E model, REM and BFLPE. They were trying to create a single integrated model to create what they termed “a unified methodological framework” (Marsh et al., 2018: 263). They tried this through an investigation concerning how students develop their beliefs about their competence during adolescence. The research was based on German maths students from 42

schools, starting the year before they moved to secondary school, and the following mandatory five years of secondary level school. They were also researching what they called “developmental equilibrium” (2018:263) which was the name given to a developmental perspective for the consistency of effects seen through the combination of models. They used six waves of research data for their analysis forming the longitudinal nature of the investigation. They created a general framework by combining the models which they thought extended previous research and provided new “developmental perspectives” on each of the models, although it relied heavily on the context of the German school system. They found that combining the three models provided an extension of possibility in their findings, instead of being limited by a single framework. The findings also indicated that feedback provided to students influenced their development of ASC. They recommended again that positive self-belief needs to be reinforced for individuals, and the reciprocal link between ASC and their grades needs to be demonstrated. Although, as previously identified, this may not always work for students who fail.

2.5.5. Summary

These investigations demonstrate how the different ASC models which were developed in isolation can be combined to provide richer evidence of the effects of ASC on students. However, these were all methods the researchers used to quantitatively examine ASC in school age children, there are few studies that focus on students in a HE context.

2.6. Research into Academic Self-concept

In general, as seen above, ASC has been used to investigate students’ perceptions of themselves as learners in a variety of studies and contexts over the years. The vast majority were in the context of high schools around the world, most often in Germany, and they focused on specific subject areas or ‘domains’ as mentioned above, mostly in relation to the domains of maths and English or verbal self-concept (see for example: Gogol et al. (2017); Marsh et al. (2016) and Baudson et al. (2017)). Research has also been almost exclusively quantitative, which is perhaps curious when exploring the way individuals perceive themselves. Quantitative instruments may be limited in the depth of detail they can provide into a perception made in a moment via a self-descriptive questionnaire. Byrne (2002:905) suggested that more qualitative analysis would add to ASC research stating, “the use of interview techniques appears to hold much promise as an alternative to self-report measures”. This addition to research may help to discover

the reasons or causal effects of students' self-perception of their ASC that contribute to broadening the scope of research with the use a qualitative approach as well as quantitative investigation. The next section moves away from the context of schools and examines the few studies that have used ASC in a HE context. It also discusses the use of the various models as seen above.

2.6.1. Research into UG students' ASC

Although most research investigating ASC has been conducted in school settings, there is an increasing, but still low number of investigations into ASC which are set in a university context. One of the first is Reynolds (1988:223) who investigated the ASC of 589 UG college students in the USA. He was looking for "correlations between the Academic Self-concept measure and subjects' grade point average (GPA)". He suggested that academic achievement might be a means by which students at university judge themselves. He used a variety of self-report measures in the form of various self-descriptive questionnaires. He was testing to see if the tool known as the Academic Self-concept Scale worked as a measure of the Academic Self-concept facet of General Self-concept, which was confirmed. The study also considered "locus of control", which concerns the connection between a person's behaviour and how it is reinforced. This can be external, which could include fate, luck, chance, or something outside of self as responsible for things that happen to them as individuals, or it can be internal, which means people take responsibility for their own behaviour (Rotter, 1966). Reynolds (1988:237) found that people who have a more internal locus of control "manifested a higher Academic Self-concept." This seems to imply that they had more self-belief, therefore, confidence in their abilities and as a result were more successful in their studies with higher GPAs, which appears to be a consistent assertion of ASC research except for the cross domain negative effects found with the I/E Model.

Parker et al. (2021) used a variety of existing self-assessment surveys to investigate the influence on ASC of their relation to race, gender, and student interactions with faculties. The study was again based in HE in the United States. The participants were final year UG students from fifty-five universities and included over ten-thousand participants. Data was collected over one year. Their findings suggest that student-faculty interactions, (meaning the interactions students have with their faculties/department, both in and out of the classroom) may be an important contributory factor to students' ASC and academic success. In relation to race, the findings indicated that different racial groups may

significantly benefit from their student-faculty interactions where self-concept improved. However there appeared to be a negative impact on ASC, possibly linked to low student-faculty interaction for female students from all racial groups. Another finding was that grade point average was a significant means of predicting ASC as also found by Reynolds (1988) above.

Another quantitative study in a higher education context is Gorges & Hollmann (2019) who investigated first year undergraduates in Germany studying Business Administration. Their aim was to establish the structure and structural change of the participants' self-concept of ability when they were faced with "novel academic learning content" (2019:496). The research was conducted via online self-descriptive questionnaires. The researchers were attempting to find evidence of change to ASC over a specific duration of time. However, they only considered a three-to-four-month period, which was at the beginning of the participants' course and then again three to four months later. This would have constituted just one semester and may not be a sufficient length of time to see evidence of change. Their findings claim that ASC appeared to be structurally stable over the period of their investigation. A longer period may have shown otherwise.

Simonsmeier et al. (2020), in another quantitative study linked to ASC and its impact on achievement, examined the issue of peer feedback and how it may improve students' ASC. This was set in higher education but again bases the study on first year undergraduates, this time German psychology students. It was a four-week web-based study using peer feedback intervention in the domain of academic writing, which was embedded in a regular writing class. They found that the participants who received peer feedback had larger gains in their ASC in academic writing, whereas their control group who did not receive peer feedback had smaller gains. This shows that peer feedback can play a potentially important role in an individual's ASC.

2.6.2. Research using the Big-fish-little-pond effect (BFLPE) in HE

Some of the ASC research in HE focuses on one specific model. A study of students in HE, again featuring first year German psychology students is a longitudinal study over the first three semesters over four waves of data collection by Rosman et al. (2020). It looks at the transition to higher education in relation to ASC and the big-fish-little-pond effect and whether there is a decrease in ASC over time. Their findings show no evidence

for the BFLPE but did find that the self-concept of students with better grades increased over time but decreased for students with lower grades. They also claimed that females' self-concept remained stable over the time, but the self-concept of males increased even though their grades were not dissimilar. This was described as “puzzling” (2020:25). They thought this may be due to how males may consider feedback from teachers or peers as more positive than females do.

A different study by Zhang (2021) investigated the BFLPE in relation to gifted students studying at an elite Chinese university (however, there is no clear definition of what constitutes an elite university). The aim of the study was to enrich research into BFLPE by investigating it in the context of higher education. He specifically wanted to discover how peer achievement affected the ASC of gifted students and to identify the key factors of intelligent students’ ASC. Quantitative data was collected from a university entrance exam at the end of the students’ first semester and surveys completed at the end of the third semester. No qualitative data was collected. He found that the achievement of peers had a negative impact on the ASC of “competent students” (2021:7), which showed that there was a BFLPE in this university, as capable students had a lower ASC when they compared themselves with their peers who they perceived as more capable. There was also a positive effect on the students’ ASC despite their personal achievement, from a variety of sources, including student-faculty interaction, peer interaction and university support. He suggests that “students in elite universities require their universities’ support, rather than material resources to build positive ASC” (2021:9).

Another study, by Jackman et al. (2011) this time with the rare inclusion of a qualitative approach, considered the BFLPE of first year medical students in Australia, using both quantitative and qualitative research tools. They claimed this was the first study of its kind on first year university medical students. There were two separate studies. The quantitative research aim was to ascertain if there was a decline in ASC and social comparison during the year. The second study was qualitative and aimed to examine the “relations between self-concept, social comparison and academic achievement...” (3:2011). Data for the quantitative study was collected via “Academic Self-Descriptive Questionnaire II” which was constructed specifically to measure ASC. It was administered twice, first early in semester one and then early semester two. It aimed to address two hypotheses which suggested a reduction of both ASC by the second semester and a reduction in self-evaluation of ability which they thought would also reduce in the same

time scale. Neither of which was found to be true, there was no change found over the time set for the research.

The second study was conducted via semi-structured focus groups at the start of semester two. The research questions were: “How do students perceive and evaluate their performance?” and “Do students find the environment competitive” (2011:4). The findings found major and minor themes. A major theme was “external attribution,” which was where students attributed their poor performance to something external such as having other commitments so they could not study, the exam question being irrelevant, not knowing what to expect, and their peer group being bright. This final attribution demonstrated the BFLPE based on social comparison of self-perception that their peers were more capable. A second major theme was related to internal attributions. An example of this was that some students thought they could do better if they made more of an effort, which also demonstrates low ASC.

The research also considered the feelings about the competitiveness of the peer group. This was found to be an issue for half of the students. They were using social comparison to peers to evaluate themselves. The researchers suggested this behaviour also pointed to the BFLPE.

Two minor themes were also found. These were that some students were satisfied with their performance, and some felt they could do better.

Overall, the findings indicate that “self-concept was not as strong as it could be” (7:2011). As some of the attributes found above show, some students were demonstrating low ASC. In the context of international PGT students, it may be possible to establish whether the participants compare themselves to others, how this impacts their ASC, and whether there is a BFLPE.

2.6.3. The I/E model applied to research in HE

Rosler et al. (2018) is one of the few studies in relation to ASC which considers the I/E model. Although it was a variation of it, termed a “generalized I/E model” (GI/E) (2018:188) that focused on university level participants. The GI/E model is said to extend “the I/E model to encompass other domains and domain-specific outcomes in different fields and disciplines.” (2018:188). They investigated trainee or pre-service teachers in

German universities who were training to be secondary school biology teachers. They were researching whether comparison of social and dimensional achievement plays a role in the formation of pre-service teachers' domain-specific interest in the subject, which was the subject they were learning to teach, and educational domains, relating to learning how to teach. Data was collected via two questionnaires at two different points in the second semester of study, and an analysis of the grades they received in their first semester in their first subject and in their educational studies.

Overall, the authors found a "positive correlation between achievement in the first subject and the educational domain, but no significant correlation between interest in the first subject and the educational domain" (2018:193). In other words, there was a positive link with their academic performance in their academic subject they were learning to teach and the educational part of their course, which teaches them how to teach. However, there was no link found in their level of interest to either domain, their main subject or learning how to teach. They also found there was "positive within-domain relations of achievements in both domains and interests on the corresponding domain" (ibid.). This relates to social comparison, and the trainee teachers comparing their achievement with other people who were learning about the same main subject, and who were on the teacher training element of their courses, and their interest in both these domains. If their achievement was higher than their peers, their interest in that domain was found to be higher. Finally, they "found a negative association between achievement in students' first subject and interest in educational studies" (ibid). This related to the trainee teachers comparing their achievement in their main subject, or first subject, with their achievement in their educational studies, learning how to teach. If they did well on their main subject, they were less interested in their educational studies. It is suggested that this may be because they did not consider them to be similar, which is a similar result to the comparison of the domains of maths and English, as seen previously, which are also unalike. Social comparison may be a useful means of increasing trainee teachers' interest in the two aspects of their course, but it might lead to them seeing themselves as either a "subject teacher" or an "educationalist".

The GI/E concept could be used to examine and compare different fields of study and different disciplines. Most previous research was subject specific, Rosler et al. (2018) in the research above have attempted to widen the scope of the use of domains using the GI/E Model, (which was originally derived by Möller et al., 2015, in their research into

dimensional comparisons and their consequences for self-concept, motivation, and emotion).

2.6.4. Research into ASC and international postgraduate students

There have been a few recent studies which have focused on PGT students. However, these did not specifically identify the study experiences of international PGT students. One study that did investigate international postgraduate students and ASC is Curtin et al. (2013). They considered ASC in the context of international and domestic students in the USA studying for PhDs. The study aimed to examine “potential differences between international and domestic doctoral student experiences of graduate school and to compare how advisor support and sense of belonging related to Academic Self-concept in both groups” (2013:129). They used an email web-based self-descriptive questionnaire. It also aimed to examine the graduates' sense of themselves as “successful academics”. (2013:109) and considered their levels of confidence concerning the various aspects of their experiences as graduate students. However, the research did not seem to clarify what constitutes “successful academics”, although they did link ASC with career goals and suggested that an ASC was a strong means of predicting a person's interest in pursuing an academic career. Their findings claimed that compared to domestic students, international students placed a higher value on research-related and academic experiences. International students, therefore, place more importance on educational and professional experiences than social experiences. They also feel a stronger sense of belonging to their departments or programmes than domestic students. However, in domestic students, a sense of belonging is related to ASC, but there is no relation between ASC and sense of belonging for international students. Both domestic and international students viewed advisor support as important for a sense of belonging and ASC.

2.6.5. Summary

The studies above all identified several aspects of ASC in the context of university level study, but most lacked qualitative investigation and consideration of the experience of studying a PGT level qualification. Few considered the experience of being an international postgraduate student. Some of the issues raised, such as grades received, sense of belonging, type of learning and use of study skills, sense of achievement, and sense-of-self as an individual, have not been examined holistically or asked the students about their perceptions of being an international PGT student from a qualitative

perspective. The use of quantitative data investigations is less useful, as already highlighted above (see Section 2.6.) in revealing the depth of international PGT students' experiences and how the participants perceive themselves in relation to aspects of ASC.

2.7. How the concept can be used

Research into ASC has evolved over the years with different models emerging but demonstrating the relationships between domains and self-perceived notions of various themes as seen above. They are concerned with self-perceived standing and place within academic systems and how this may affect change in individuals' self-belief, levels of achievement and how this reflects their levels of ASC. This concept and its key themes have not specifically been used to investigate international PGT student experience in a UK context, which if explored to include a qualitative method as recommended by Byrne (2002) may reveal a different view and shed a different hue on the experience of being an international PGT student. This research will therefore be used to investigate this and their Academic Self-concept, including the dimensional change from UG to PGT and how social comparison may impact on their behaviour, including consideration of their self-belief and perceptions of their achievement in relation to studying at PGT level.

2.7.1. How ASC relates to other terms used in the thesis

The ASC literature provides key terms, which are key components in research into ASC. They have been used to identify and understand ASC. These will be highlighted below.

2.7.1.1. ASC & self-belief

An integral component of ASC is self-belief. The strength or weakness of levels of an individual's self-belief has been shown to relate to levels of achievement as seen in much of the ASC research discussed above (and see Marsh & Craven, 2006). Levels of self-belief can denote levels of confidence in one's capabilities. The term 'confidence' does not seem to be used explicitly in the research into students' ASC, although, it seems to be implicit in much of those discussions with reference to 'positive self-belief' (Marsh & Craven, 2006; and Marsh et al., 2018). The exception appears to be the research above by Curtin et al. (2013). However, it is possibly a feature of ASC that a "higher academic self-concept" as discussed by Reynolds (1988:237) may denote a level of confidence, which it seems in turn also equates to higher level of achievement, which could also be termed 'success'. Moogan (2018) investigated the decision-making processes of PG students studying master's in business administration (MBAs) in the UK. She considers the issue of confidence and how this grew over the course of their programme of study,

following the initial period of study during which they reportedly felt “intimidated” (2018: 1). The findings in relation to confidence show that it was not until the students received their first set of assignment results that they discovered whether they understood what was required of them. This was mainly due to uncertainty at the beginning about what was required of them as students. Therefore, student confidence grew when they had a better understanding and appropriate feedback to support their work.

Telbis, Helgeson & Kingsbury (2014) examined international students in the USA in terms of success and confidence. They found a high level of confidence in students who achieved high scores and those with low scores lacked confidence. This is the same conclusion found by Marsh & Craven (2006) (but using different terminology. In ASC the equivalent is ‘postive self-belief' (confidence) leading to achievement (success).

2.7.1.2. ASC & achievement

Over the years, research into ASC has been used to consider student achievement (as seen above). This has included the ‘chicken and egg debate’ of Marsh (see Marsh & Craven, 2006), which seeks to answer whether achievement leads to ASC or vice versa. Exploring levels of achievement is prevalent in much of the research. In the literature, researchers talk about successfully completing something. This may depend on who is looking at it and from what perspective. Young et al. (2013) investigated international postgraduate students’ adjustments to being students in the UK. They talk about “successful adjustment” (2013:152) but do not seem to state what that means. The focus seems to be concerned with the factors that lead to successful adjustment, but the “successful” element of this is not clear. They mention the “degree of success” (ibid) in relation to the areas of “assessed academic work, psychological well-being and satisfaction with life…in the new environment” (ibid). They found that “academic success for ISs [International students] in the humanities and social sciences in the UK is strongly associated with language proficiency in English, as well as high CE [cultural empathy], OM [open-mindedness], SI [social initiative] and high levels of contact with non-co-national ISs” (2013:166). Therefore, ‘success’ in this case means they were capable, able or good at the above to achieve academic success, which seems to mean they performed well on their course and achieved high grades. This is the same type of consideration found in ASC research regarding achievement.

Poyrazli & Isaiah (2018) in their research into international students in the USA refer to Grade Point Average (GPA) as a possible marker of success. They were investigating students who were considered to be failing and on probation in their studies as they had

low GPAs and needed to work on “grade recovery” (2018: 62) presumably if this happened, they would be considered successful. In the traditional sense of the word, success at university from an institutions’ perspective means good awards, with students achieving first class or upper second-class degrees. At PG level this equates to distinctions and commendations.

Thus, according to Nachatar Singh (2018:1036): “In the literature academic success is simplistically defined as grades and timely completion of studies…a study by Singh (2017) reported that academic success of postgraduate international students in Malaysia is multifaceted such as development of research skills, personal development growth and contribution to home countries”. Success as something that is multi-faceted is probably a good way to look at it. It is not a flat one-dimensional notion but a diamond like cut of many faces and may look different depending on which angle you look at it from.

Similarly, The UK Higher Education Academy (HEA), which defines itself as “the national body which champions teaching excellence” (https://www.heacademy.ac.uk/about-us), and provides guidance to UK HEIs, devotes a whole strategic paper advising on enhancing student success but in the first few lines of their paper states: “Success means different things to different students” (2016:2) supporting the comments above. They continue by stating it is the role of HE to help “students transform their lives through HE …” (2016:2). They seem to support the difficulty in defining success and suggest that trying to “pin down a “watertight” definition of ‘student success’ is a reductive exercise” (2016:2)

2.7.1.3. ASC & social comparison

Social comparison is also used as a key component in ASC by individuals in relation to self and to other students studying in the same domain or in a different domain as (see Marsh 1987; Marsh & Craven, 2006). It is often related to achievement. It has the potential to place students in a seemingly self-devised ‘pecking order’ based on self-perceived ability and comparison to peers as in the BFLPE model or it is domain specific as seen in the I/E model.

2.7.1.4. ASC & dimensional comparison

Dimensional comparison has been used in ASC research to compare across academic subjects, usually in maths, or the sciences with English (see Moller et al. 2015). It has been broadened to include ‘cross dimensional comparison’ which equates to different dimensions, not only academic subjects, but settings over time, such as the change from

school to university, or different levels of schooling. These require a longitudinal approach to data collection to allow for evidence of change.

2.7.1.5. ASC & feedback

Conclusions drawn in some research papers by Marsh (for example, Marsh et al., 2018) refer to the importance of feedback to self-belief and levels of achievement to school aged children. It is not only that feedback is given but what it can be used for in terms of building self-belief that is important as seen earlier. It can be used to shape and enhance self-belief and may be important in the quest to gain higher levels of achievement in education, which in turn may lift the standing of educational establishments, which is a prize often sought by universities through the annual publication of league tables, which are used to measure an institutions' standing for courses and research (see for example: https://www.theguardian.com/education/ng-interactive/2022/sep/24/the-guardian-university-guide-2023-the-rankings Last accessed 22/4/2024)

2.8. Limitations of ASC research

Research into ASC, as has been mentioned above, has mostly been used to investigate school aged children in Germany, with some more recent investigations relating to university level education. Investigations involving PGT students in the UK are lacking. Likewise, the principal method of data collection and analysis has been quantitative, relying on large statistical samples. It is perhaps difficult from this method alone to understand the reasons why people make their decisions. Quantitative analysis can reveal trends and possible theories to support the findings, but it cannot necessarily reveal the inner thoughts of the participants and their reasoning. Qualitative analysis would reveal why people behave or think the way they do. If ASC can be used to predict behaviour, why not discover the actual behaviour chosen by the participants and the actual consequences of their self-belief and what may make a difference to their PGT learning experience. With this knowledge into individual experience may come better understanding, and instead of research that is constantly making recommendations for the type of support required by PGT international students, which is clearly not having much effect as the recommendations for change continue to be suggested, a behind the scenes examination of PGT students being, and thinking, rather than what they are thought to be capable of could provide an alternative perspective from which to consider what they actually need. The ASC lens will provide that alternative platform on international PGT experience and an alternative use of the ASC research, taking it further with use of qualitative interview data, supported by quantitative self-descriptive

questionnaires to reveal more detail in addition to the quantitative findings, which has been lacking in previous research into ASC.

2.9. Literature review summary

The literature review has demonstrated the importance of international students to UK universities and their growing numbers, the benefits of studying in the UK for international students and the benefits their presence brings to UK HE communities. It discussed the recent challenges universities face such as increased costs and the falling value of home student fees as a contributing factor for the need to grow international student numbers. Research into international students' experiences in HE was examined which focused on international student transition and claims made about their lack of ability and knowledge of academic requirements. These claims have been challenged in the literature with students developing various coping strategies while universities continue to try to devise ways to support students with their studies. The chapter then moved to what is missing from the research, focusing on students' sense of self. The lens of Academic Self-concept was introduced to view international student experience which is a part of the General Self-concept model. Other models of ASC were discussed including the Internal/External Model, the Reciprocal Effects Model, and the Big-fish-little-pond-effects Model, and then combinations of these. They have been used to investigate mainly school children but have also been used in a university context using almost exclusively a quantitative approach to research. Research into these areas was examined. How the concept can be applied using both a qualitative and quantitative approach was posited, followed by the limitations of previous ASC research. The next chapter will present and discuss the philosophical and methodological framework for the research.

Chapter Three: Methodology

3.1. Introduction

This chapter presents and discusses the rationale for the research method deployed in this study. It provides the aims of the study and the research questions. It considers the epistemological assumptions and research philosophy leading to the research design. This includes the different paradigms that contributed to the use of a mixed method approach, utilising both quantitative and qualitative tools. It then provides the context for the research and the design and rationale for the creation of the research instruments. It also considers the limitations of these. The ethical considerations of the research are presented. The choice of participants is discussed with details on how they were recruited to form the research sample. Details of the pilot study are given, which included a review of the research instruments and reconsideration of the recruitment process and the changes this engendered. It then outlines the main data collection process, providing participant information and the timings of the data collection over an extended period, creating a longitudinal study. It discusses approaches to the analysis of the data and issues of validity and reliability in mixed method research. It ends with a summary of the chapter.

3.2. Aims of the study

The purpose of this research is to investigate the experiences of international postgraduate students studying postgraduate taught (PGT) programmes at a UK university, using the lens of Academic Self-concept (ASC). It seeks to examine their experiences and perceptions of the academic activities that contributed to their PGT study. It broadly aims to identify the type of academic activities the participants required on their previous undergraduate courses and how these varied from the type of academic activities they believed were required on their PGT courses. It will consider how confident the participants felt about the academic activities and if their perception of their capabilities changed over the duration of their courses and the reasons for possible altered opinions. In addition, it seeks to identify how the participants navigated their way through the academic activities, and what if anything, impacted their self-perception. It will investigate the strategies they adopted to complete their programmes. It also aims to explore whether Academic Self-concept has any bearing on students' notions of success,

and finally it considers how this information may translate into a better understanding of international PGT students' experience in HEIs in the UK.

The reason for this research, is the general lack of inquiry into international PGT students studying in the UK which focuses on their reflections of their experience of 'being' an international PGT student. There is not a clear understanding of this as demonstrated in the literature review. There has also not been much research which examines this type and level of cohort in relation to Academic Self-concept to help shed light on their perceptions of being a student, and barely any that examines their experiences using a qualitative investigation. Most of the research into Academic Self-concept has been quantitative in nature, using self-descriptive questionnaires to ascertain mostly school children's self-perceptions of their abilities (see Gogol, et al., 2017; Erten & Burden, 2014; Baudson et al., 2017; Marsh et al., 2016 and Wouters et al., 2012). As discussed in the literature review, Byrne (2002) believes that this quantitative approach to research into ASC is limited, and it would benefit from also including a qualitative aspect to gain a more expansive picture of students' perceptions of their ASC.

The intention is to investigate the participants at three points in time, also known as 'waves'. These will incorporate the entire duration of their courses to track possible changes in their self-perception, or Academic Self-concept, related to the academic activities they have experienced. To achieve this, it will utilise both quantitative and qualitative methods in the form of self-descriptive questionnaires (SDQs) and semi-structured interviews. The findings in relation to their time spent studying in the UK, may assist with a clearer understanding of the PGT students' experience on programmes, and will highlight any issues that emerge requiring further consideration. This in turn provides an opportunity for the institution to gain clarity of vision regarding their international PGT student community, and consequently could enable it to strengthen their offer to attract more international students from which the whole university can benefit.

3.3. Research questions

3.3.1. Main research question

The main research question is:

To what extent does the Academic Self-concept affect the experiences of a group of international postgraduate students studying at a UK HEI?

3.3.2. Subsidiary questions

- What experiences of being an international student demonstrate the participants' ASC?
- Does the participants' ASC change over the duration of their courses? If so, how, and why?
- Is there a correlation between the participants' ASC and confidence (self-belief), and ASC and success (achievement), and if so, what is it?
- What does this mean for the support offered to these international PGT students for their UK HEI and for UK HEIs more generally.

3.4. Research Design

This section will present the different research philosophies that underpin the design of the project. It will provide a rationale for the use of the approach which combines the use of both quantitative and qualitative methods that comprise different paradigms. These will be discussed further below.

3.4.1. Epistemological assumptions and research philosophy

To investigate the research questions, it is necessary to identify the best way to proceed, and this is dependent to a large extent on how the researcher views the world. There are many ways of seeing the world, different worldviews, which Kuhn conceptualises as 'paradigms' (1962). The term paradigm is defined by Mertens (2007:215) as "...a tool to identify one's own worldview or, in research terminology, identify one's paradigm: a metaphysical construct associated with specific philosophical assumptions that describes one's worldview."

Paradigms comprise four elements (Guba & Lincoln, 1989). These are epistemology, ontology, methodology and axiology. Epistemology relates to knowing how we know 'truth' or reality. Ontology is a branch of philosophy concerned with the nature of reality, what we believe to be real. Methodology is how we gain knowledge, the research design, the methods, or approaches used to investigate and gather the data. Finally, axiology relates to the issues of ethics and values, ensuring appropriate ethical guidelines and principles are followed (see: Kivunja & Kuyini, 2017).

An example of a paradigm is Positivism, the use of a scientific objective approach to investigate hypotheses (see Howell 2013). A positivist paradigm seeks to objectively test

a theory already thought. A possible example is testing the effects of lack of gravity in outer space to prove or disprove the proposed hypothesis. This contrasts with a different paradigm, the interpretivist paradigm, in which the theory emerges from the data. It does not begin with a specific hypothesis, but subjectively interprets the findings. Using the lack of gravity example, an interpretivist paradigm might focus on those who have experienced lack of gravity in outer space and their thoughts on their experience to then create theory. There are examples of other paradigms, such as a Critical paradigm, which are studies related to social justice, they aim to give people a voice due to their lack of one (Kivunja & Kuyini, 2017) and Pragmatism, which will be discussed further below.

This research uses elements of seemingly opposing paradigms considered to be two contrasting worldviews. It combines them using a mixed method approach to investigate how the participants perceived their lived experience of studying as a postgraduate student. The following section will further discuss the paradigms that connect to the origins of this mixed method approach, often used in educational research. These paradigms are Positivism, Post positivism, Constructivism and Pragmatism

3.4.2. Different paradigms

3.4.2.1 A Positivist paradigm

Positivism is a paradigm proposed by Auguste Comte in the mid-nineteenth century. It is traditionally considered to be the 'scientific' approach to research (Howell, 2013). The epistemology is based on experimentation, observations, testing hypotheses, use of mathematics and logic (see Howell 2013 and Kivunja & Kuyini, 2017). Positivists asserted that their epistemological relationship with the subject or object was not influenced by their feelings and beliefs, and they believed therefore these had no impact on the interpretations of their findings (Teddlie & Tashakkori, 2009). It was aimed at being objective and value free. They thought they could separate themselves as human beings from the 'entity' that was research.

From an ontological perspective, positivist ''reality or 'truth' is something 'discoverable' or 'knowable', existing in or of itself. In other words, truth can be found out there in the external world (Howell, 2013). This has also been termed 'Naive realism' (see Kivunja & Kuyini, 2017). This is the idea that external reality can be discovered and completely understood (Howell, 2013).

The methodology of positivism was experimental, based on testing or manipulating variables (which refers to any conditions that can change, an example would be monitoring the change in atmospheric temperature during daylight hours) and changes in them using quantitative analysis generating and analysing numerical data (Teddlie & Tashakkori, 2009). This was to test the proposed theory. As stated above, positivist research was mainly used in scientific enquiry.

3.4.2.2. A Post-positivist paradigm

Post-positivism arose following criticisms of positivism. The main criticism related to it not being possible to remain detached and separated from reality. Post-positivists thought there was an existing reality or truth, but it was imperfect or probabilistic (Howell, 2013). Compared to the epistemology of the positivists, post-positivists thought reality could never be fully understood but only approximated (Kivunja & Kuyini, 2017). They acknowledged that the interpretations of their findings were influenced by their beliefs and values and how they interpreted their data. This was a change from positivists as stated above, who did not think their own belief systems and values influenced their work (Teddlie & Tashakkori, 2009). Ontologically, post-positivists also believed in a single reality like the positivists, but it may not be possible to fully understand due to hidden variables and a lack of absolutes in nature, that could be termed a lack of certainty (Lincoln et al., 2011, in Denzin & Lincoln (Eds.), 2011). However, like positivism, post-positivism is said to use a “top-down” (Cresswell & Piano Clark 2011:41) method, which begins with a theory or hypothesis, and gathers data to confirm or contradict the proposed theory (Cresswell & Piano Clark, 2011). Therefore, the starting point with post-positivism is an assumption, something that is already thought may be the case, and then testing and proving whether it is the actual reality of the situation, which is the same as positivism. It differs from positivism, as post-positivists accept there are uncertainties and approximations, due to hidden variables, which cannot be known.

3.4.2.3. A Constructivist/Interpretivist paradigm

A contrasting paradigm to positivism and post-positivism is constructivism, also referred to as interpretivism. It argues that from an ontological perspective, any ‘reality’ is constructed by “those who believe they have discovered and investigated it,” as conveyed by Watzlawick (1984:10). Therefore, reality does not exist as separate, something other, as with the positivists, but from an epistemological perspective, it is a human construct, which is influenced by “social or cultural factors” (Guba & Lincoln 1989:12). This can

mean that there are many and equally valid multiple realities. This is also a criticism of the paradigm. What is considered as constructed 'truth', may also be considered true or false simultaneously (Howell, 2013), which is not necessarily helpful.

Compared to post-positivism, it has a different starting point methodologically. Instead of a 'top-down' approach, it begins at the bottom with the data and works its way up, constructing meaning from the data, which is generally qualitative, or mixed methods, utilising both qualitative and quantitative data. According to Cresswell and Piano Clark (2011: 40) the research moves "from individual perspectives to broad patterns and, ultimately to broad understandings".

This links to an emergent grounded theory approach to research data. Its inception was in 1967 by Glaser and Strauss. It is a means of analysing qualitative data, said to be systematic and flexible, from which to construct theories (Charmaz, 2014). It necessitates a strategy of comparative data analysis requiring interaction between the researcher, the data, and the emerging analysis (ibid.). It can also be applied to mixed method data analysis (see Creamer, 2018).

3.4.2.4. A Pragmatist paradigm

A further paradigm is pragmatism. It is defined by Tashakkori and Teddlie (2003:713) as:

> a deconstructive paradigm that debunks concepts such as "truth" and "reality" and focuses instead on "what works" as the truth regarding the research questions under investigation. Pragmatism rejects the either/or choices associated with the paradigm wars, advocates for the use of mixed methods in research, and acknowledges that the values of the researcher play a large role in interpretation of results.

Pragmatism emerged from the paradigm debate of the 1970s to 1990s, which was a research conflict between the scientific research of positivism and post-positivism, and the different way of seeing derived from constructivist/interpretivist research (Teddlie & Tashakkori, 2009). It therefore rejects the separatism of the positivists, post-positivists and constructivists and sets out an alternative means of seeing. The process connected to mixed methods research relates to the research questions, which are said to "guide MM [mixed method] investigations" (Teddlie & Tashakkori, 2009:8). Numerical and narrative data are both utilised to find answers to the questions, unlike constructivism, which begins with the data to build meaning, and post-positivism which starts with a theory and proceeds to test whether it is the case.

3.4.3. The philosophical underpinnings of the research

This research takes a mixed-method approach, collecting both quantitative and qualitative data, with the aim to answer the research questions based on the themes arising from the data, using an emergent grounded theory approach to the analysis, as discussed above. “Taking a mixed method approach can add robustness to the findings (i.e., beliefs and values), rather than the typical associations of certain paradigms with quantitative research and others for qualitative research” (Cresswell & Piano Clark, 2011: 13). Instead of focusing on a potential single worldview, like the positivist search for truth existing somewhere out there, and the constructivist view that reality is a human co-construction of cultural or social factors, mixing methods can produce a fuller more diverse picture of what is being investigated, which is the aim of this research. There have been numerous debates about where this approach sits in relation to worldviews. Many researchers associate a mixed method approach to research as pragmatism, as seen above (Teddlie & Tashakkori, 2009) Other researchers attest that multiple paradigms form the basis of a mixed method approach (see Cresswell, 2003). Whereas some reject the need to fit into a particular paradigm and advocate “multiple, diverse perspectives” (Teddlie & Tashakkori, 2009:99). These are said to help explain the complexity of society.

In addition, Teddlie and Tashakkori assert that using a mixed method approach offers a good opportunity “to assess the overall consistency of the data quality across a variety of settings” (2009:209). Therefore, a mixed method approach possibly provides a better chance of providing reliable and valid data for analysis as it is produced in multiple ways, so can offer some form of triangulation opportunity. Triangulation is also reportedly an overused term (Teddlie & Tashakkori, 2009) but it is defined as “combinations and comparisons of multiple data sources, data collection and analysis procedures, research methods, investigators and inferences that occur at the end of a study” (Teddlie & Tashakkori, 2009:27). Despite the criticism, triangulation is utilised in this study, using the consistency of the participants answers over the three waves of data collection, and by comparing the self-descriptive questionnaire and interview responses. This provides a means of establishing the validity and reliability of the participants responses.

The reason for choosing a mixed method approach is to gather a broad view of the opinions of the PGT cohort. This will be achieved by using a quantitative method in the

form of self-descriptive questionnaires. Then, using a smaller number of participants and a qualitative method in the form of the semi-structured interviews, to focus more intensively on their experience of studying on a PGT programme. This is to discover what impacts their ASC, and in turn how this impacts their experience of being a PGT student. The addition of a qualitative approach in the form of semi-structured interviews is to gather more in-depth data for analysis, which previous research into ASC has lacked. The addition of interviews, unlike the questionnaires, provides opportunities to ask for clarity regarding a response to a question, to probe, and to draw out further detail, which is difficult to accomplish, even with carefully crafted questionnaire questions. This should overcome the limitations of solely quantitative inquiry into ASC, which Byrne (2002) outlined. She believed that if a qualitative approach was used, it would allow for more clarification and extension, which would provide an added dimension to ASC research than quantitative self-descriptive questionnaire data alone. Therefore, integrating the two methods is aimed at achieving better insight as described by Piano Clark (2019: 3) "researchers that explicitly plan for integration often have a better chance of achieving insights that arise from effectively combining the quantitative and qualitative aspects of the study." What is key with using any methodological approach is that it is appropriate to the inquiry and will generate the data required to answer or address the research questions. As Cresswell and Piano Clark (2011:11) state, the purpose of a mixed method investigation is that it "…fits the problem under study".

3.5. Research setting and context.

The research is set in a large HEI in the north-east of England. The institution comprises four academic faculties, which are Arts, Design and Social Sciences, Business and Law, Engineering and Environment, and Health and Life Sciences. Each year the university attracts hundreds of international PGT students. In 2020/21, 2,062 PGT students were enrolled, out of a total student intake of 27,808, which equates to approximately 7.4 % of the university student population. There were approximately 89 PGT courses offered across all the faculties.

The research was aimed at investigating international postgraduate taught (PGT) students' Academic Self-concept, using self-descriptive questionnaires (SDQs) and semi-structured interviews. This required tracking the students' experiences on their courses over three points in time, near the start of their first semester, in their second

semester and finally once they had completed all their academic work near the end of their programmes (see Table 3.1. below).

Table 3. 1.: General overview of timings of the data collection.

Timing	1. Quantitative data	2. Qualitative data
Semester 1	Self-descriptive questionnaire 1 (SDQ1)	Semi structured interview 1
Semester 2	Self-descriptive questionnaire 2 (SDQ2)	Semi structured interview 2
End of course	Self-descriptive questionnaire 3 (SDQ3)	Semi structured interview 3

The majority of PGT courses are usually for one year, which is the case for many September start courses. However, there are programmes that run for eighteen months, or two years in duration as some of the courses include a one semester placement. This required a long period of data collection, to ensure the participants were tracked for the entire length of their course to fulfil the research design. This was achieved in all instances, but it meant the data collection period was over two and a half years to account for a small number of two-year September start participants. This provided a unique element to this study as most full-time research students would probably not have that amount of time available in which to collect their data. As outlined above, the participants were invited to complete an online self-descriptive questionnaire, which included a request for a follow-up interview to ask more in-depth questions in the form of a semi-structured interview.

3.5.1. Participants and sampling

The plan was to gather a sample of participants from across the university. It involved “purposeful random sampling” and “purposeful sampling” (Teddlie & Tashakkori, 2009;186-187) as it aimed to recruit international postgraduate students, rather than a random sample of students at the institution. The purposeful random sampling applied to the questionnaires as it was open to all those invited. The participants in the purposeful sample, were those who volunteered to participate in the interviews from the purposeful random sample group. Both samples were aimed at representing the variety and diversity of the type of academic activities that are required on the different programmes of study. For example, the academic activities required by PGT MA Design students are different to those required of a student on a MSc in Accounting programme, and likewise skills for

accounting were different again from those of a PGT course in Mechanical Engineering or Nursing.

Due to the timing of my PhD enrolment in March 2017, the data collection period needed to begin as soon as the contributing elements were prepared, and appropriate permissions were granted. To ensure diversity in the nationalities and programmes of participants, different cohorts of students were invited to participate. Some started their courses in January, others in September 2019. The reason two cohorts were required was an attempt to ensure diversity of representation in the research, which was not available using the January cohort alone.

3.5.2. A global pandemic

Midway through the data collection period, in March 2020, the world was hit by the global Covid-19 pandemic. This affected the participants in different ways with some being recalled home, changes to teaching delivery, which saw a rapid switch to online as opposed to face to face in-person teaching, and there were last minute changes to modes of assessments. The pandemic had an impact on some people more than others, which was reflected by a few in their interviews after March 2020. As we shall see in Chapter 5, Section 5.4.2, it also impacted on their self-perception and focus. It did not however, impede the research from the interview participant engagement perspective, nor did it become a major issue in the data or the data collection. As it was such a major occurrence it needs to be noted as such. The impact made it more difficult for the researcher, who also has a full-time role managing a department of people who needed additional attention and support, reducing the ability to focus on research. In terms of continuing the data collection process, the interviews were still possible using the Teams online platform.

3.6. Creation of research instruments

To devise appropriate research questions and tools, a spreadsheet was created that analysed previous research into ASC (see Appendix 1). It detailed the authors, the date the research was published, the title, the research questions, the tools used, the number and type of participants and the method. This highlighted that most of the research into ASC investigated school-aged children using quantitative self-descriptive questionnaires. This work also helped to identify gaps in research, and apart from a few studies linking

Academic Self-concept and university level study (as discussed in the Literature Review, see Chapter 2, Section 2.6.1.), there currently does not appear to be a mixed method study that explores PGT students' ASC in relation to the academic activities they are required to complete on their programmes at this level. This is an original approach to researching ASC.

3.6.1. Self-descriptive questionnaire design in general

Self-descriptive questionnaires as stated above, have been the main means of investigating Academic Self-concept. According to Teddlie and Tashakkori (2009:8): "…self-assessment survey research is a systematic method for data collection with the goal of predicting population attributes or behaviours (e.g., voting, consumer behaviour)". For this research, it is a means of tracking change in students' self-perception over time in relation to their individual experiences on their programmes.

3.6.1.1. The benefits of using a self-descriptive questionnaire

Self-descriptive questionnaires can take time to develop and require testing before they are administered. However, they are an efficient way of gathering an overview of a large quantity of participants, especially if administered online, enabling easier analysis using already existing on-line tools such as the Statistical Program for the Social Sciences (SPSS) (see later discussion). They were also used as a vehicle to recruit students for the semi-structured interviews that formed the second part of each round of data collection.

3.6.1.2. Previous self-descriptive questionnaires used for ASC.

There have been many self-assessment tools (self-descriptive questionnaires) used in ASC research, examples include the following: The "Self-esteem scale" created by Rosenburg (1965), which was used in general self-concept research consisting of 10 items and a 4-point Likert scale from 'strongly agree' to 'disagree'. It was attempting to measure self-worth. Examples of questions include; "On the whole, I am satisfied with myself", and "I am able to do things as well as most other people" (see https://scholar.harvard.edu/files/bettina.hoeppner/files/rosenberg_self-esteem_scale.pdf. Marsh & O'Neill (1984) created the "Self-description questionnaire" (SDQIII) which was seeking to measure thirteen factors of self-concept in late adolescents. These included academic-self-concept concerning reading and maths, and non-Academic Self-concept such as physical appearance, peer relations and physical abilities. It comprised 136 items or statements and used an 8-point Likert scale from

‘definitely false’ to ‘definitely true’. The items included, for example, “9. I enjoy doing work for academic subjects” (1984:169) and “41. Spiritual/religious beliefs make my life better and make me happier.” These were among the other 134 items which were not specific enough for the purpose of an investigation into PGT students and their academic activities.

One of the most recent versions of an investigative tool was the Academic Self-concept Scale by Lui et al. (2005) which was developed in their research into the ASC of school children in Singapore. Their ASC scale was subsequently tested by Matovu (2014) whose aim was to validate Liu et al.’s (2005) scale, which he did in his research on Malaysian University UG students, which brings the research into ASC closer to my study. Matovu (2014) focused on the link between Academic Self-concept and achievement, as do many other studies, but by only using a quantitative method. The original ASC questions by Liu et al. (2005) consisted of twenty items and used a seven-point Likert scale from ‘strongly disagree’ to ‘strongly agree’. The use of a seven-point scale seemed unnecessary as it was not clear what ’disagree somewhat’ and ‘agree somewhat’ really added. Their aim was to collect data concerning academic confidence and academic effort, which were themes mixed throughout the scale. However, the questions were very much related to school aged children but provided a useful starting point for the design of the self-descriptive questionnaire for this research, which was created to reflect the academic activities required of PGT students. Table 3.2 below, demonstrates the beginning of the process of adapting the Liu et al. (2005) questionnaire for a HE context, and the thoughts related to relevance and purpose of the items.

Table 3.2.: Example of the process used to adapt Lui, Wang & Parker’s (2005) questionnaire.

Original Lui & Wang (2005) academic-self questionnaire	**2018 amended academic self-questionnaire aimed at HE**	***Rationale for the question.***
1. I can follow the lessons easily	I can follow lectures easily	*General analysis of self and capabilities*
2. I daydream a lot in class.	I daydream a lot in lectures and seminars	*(Not used in final questionnaire alternative question created that was more relevant to the PGT student context – see below),*
3. I am able to help my classmates with their schoolwork if permitted.	I am able to help other people on the course by advising them how to complete the work required	*Self-analysis: situating self as more able or not than others*

4. I often do my homework without thinking.	Not relevant	
5. If I work hard, I think I can go to the college or university.	Not relevant	
6. I pay attention to the teachers during lessons.	I pay attention to my lecturers during seminars and lectures.	*Self-analysis related to engagement with the course and learning process*
7. Most of my classmates are smarter than I am.	Most of the people on my course are smarter than I am	*Self-analysis: comparison to others*
8. I study hard for my tests.	I study hard to pass the course.	*Self-analysis: assessment of effort*
9. My teachers feel that I am poor in my work.	My lecturers feel that my participation in the course is poor	*Self-analysis: of how seen by others*
10. I am usually interested in my schoolwork.	I am usually interested in the work I need to do on my course.	*Self-analysis: not sure it reveals much - could be removed,*
11. I often forget what I have learnt.	I often forget what I have learned	*Not sure it adds anything*
12. I am willing to do my best to pass all the subjects.	I am willing to do my best to pass all my modules.	*Self-analysis: may reveal how motivated students are or if they are only hoping to complete the course*
13. I get frightened when I am asked a question by the teachers.	I am not confident to answer when asked a question by my lecturers in seminars and lectures	*Self- analysis of level of confidence and participation*
14. I often feel like quitting school.	I often feel like quitting the course	*Self-analysis of feelings and motivation. Self-belief*
15. I am good in most of my school subjects.	I know what is required of me in most of my modules.	*Self-analysis of understanding what they are required to do to complete the course*
16. I am always waiting for the lessons to end.	I am always waiting for teaching sessions to end	*Self-analysis: level of boredom/motivation*
17. I always do poorly in tests.	I always do poorly in tests	*Self-analysis of belief in their capabilities*
18. I do not give up easily when I am faced with a difficult question in my schoolwork	I do not give up easily when I am faced with difficult academic questions to answer	*Self-analysis: of determination to try to complete work required*
19. I am able to do better than my friends in most subjects.	I am able to do better than the students on my course in most modules	*Self-analysis of capabilities in relation to others*
20. I am not willing to put in more effort in my schoolwork	I am not willing to put in more effort to my university study	*Self-analysis of effort.*

3.6.1.3. Design of each section of the self-descriptive questionnaires (SDQs)

The first SDQ was divided into five sections. The first and second section (see Tables 3.3. & 3.4. below) asked about their PGT course. This was to try to ascertain their current ability and knowledge of the academic activities they thought were required at the start of their PGT courses. The first section, Section 1, consisted of twelve statements regarding self-assessment of knowledge and ability to complete certain academic activities. It used a five-point Likert scale, starting with 'strongly disagree' and ending with 'strongly agree'. The table above was used to create Sections 1 and 2 of the self-assessment survey with the following questions:

Table 3.3.: Section1, List of Self-assessment capability statements

Section 1	**Academic activity capability statement**
1.1.	I can follow lectures easily
1.2.	I can concentrate well in lectures and seminars
1.3.	I can advise other people on my course how to complete the work required
1.4.	I pay attention to my lecturers during seminars and lectures
1.5.	Most of the people on my course are smarter than I am
1.6.	I study hard to pass the course
1.7.	I participate/speak in lectures and seminars
1.8	I am confident to answer questions when asked by my lecturers in sessions
1.9.	I know what is required of me to study at PGT level
1.10.	I do not give up easily when faced with difficult questions
1.11.	I am able to do better than other students on my course in most of my modules
1.12.	I am willing to put in more effort to university study.

Section 2 (see Table 3.4. below) comprised three negatively focused questions relating to sense-of-self reflecting on their feelings, and how much they thought about them. It also used a five-point Likert scale, but different to section one in the first self-descriptive questionnaire, this time ranging from 'always to never.'

Table 3.4.: Section 2 of the questionnaire, the negatively focused statements.

Section 2	**Negatively focused statements**
2.1	I feel like quitting the course
2.2	I am waiting for the teaching session to end
2.3	I do poorly in tests

The third section was developed based on a needs analysis questionnaire, relating to study skills statements by Cottrell (2013: 48) (see Table 3.5 below). The idea of which, was used and adapted with some additional activities added to reflect PGT specific activities, and some other general requirements, such as using a computer, and reflective writing. It was used in a way to reflect the opinions of the participants through use of a 5-point Likert scale from 'never' to 'always', which is unlike Cotterell (see Table 3.5. for the adapted version)

Table 3.5.: Cottrell's Study Skills Statements (2013:48)

	Study Skills
1.	organising myself for study
2.	using my study time well
3,	thinking creatively
4.	solved problems
5.	reading for academic purposes
6.	searching for information for assignments
7.	making, and using, notes
8.	making good use of lectures/taught sessions
9.	participating in groupwork and seminars
10.	making presentations
11.	managing writing tasks
12.	writing essays using academic conventions
13.	writing reports and dissertations
14.	completing a research project
15.	avoiding cheating/plagiarism
16.	citing sources and writing references
17.	using numbers in assignments
18.	thinking critically and analytically
19.	evaluating my own and others' arguments
20.	developing memory skills
21.	taking exams
22.	evaluating my work

Section 3 (see Table 3.6.) had a total of twenty-seven skills statements, which concerned the participants' previous UG courses and the type of academic tasks they were required to use. The purpose of this section, as mentioned above, was to provide a comparison with the type of academic activities they had completed at that level of study, and how it differed from what they had to do on their PGT courses.

Table 3.6.: Section 3 of the questionnaire focusing on participants' UG courses.

Section 3	Academic activities: On my UG course I...
3.1.	Organised myself for study
3.2.	Used my study time well
3.3.	Thought creatively
3.4.	Solved problems
3.5.	Read for academic purposes
3.6.	Actively listened to others
3.7.	Searched for information
3.8.	Made and used notes
3.9.	Made good use of lectures and taught sessions
3.10.	Participating in groupwork and seminars
3.11.	Made presentations
3.12.	Managed writing tasks
3.13.	Wrote essays and used academic conventions
3.14.	Wrote reports
3.15.	Wrote a dissertation
3.16.	Wrote reflective assignments
3.17.	Completed a research project
3.18.	Avoided cheating and plagiarism
3.19.	Cited sources and wrote references
3.20.	Used numbers in assignment
3.21.	Used technical language
3.22.	Used computer skills for academic work
3.23.	Thought critically and analytically
3.24.	Evaluated my own and others' arguments
3.25	Developed memory skills
3.26	Took exams
3.27	Evaluated my work

Section 4 of the questionnaire, focused on the participants PGT courses, and the participants' opinions of the academic activities they thought were required, based on what they thought they needed to be able to complete, starting with "I need to...". The list of activities was the same as Section 3 above but with the statements changed to the present tense, e.g. 'I need to organise myself for study', 'I use my study time well'. Section 4 consisted of the same twenty-seven academic activity statements, but the participants were asked to consider which academic activities they thought they needed to be able to complete their PGT courses. Sections 3 and 4 in the first self-descriptive questionnaire, used the same five-point Likert scales as Section 2, ranging from 'always' to 'never'.

The final section, Section 5 in wave one, but Section 3 in waves two and three, used the same statements, but to assess how 'good' the participants felt they were at each activity. The aim was to assess their levels of confidence in each activity and to track how this may have changed over the duration of their studies. It repeated the twenty-seven academic activity statements, but for this section, asked the participants to reflect on the activities they needed on their PGT course, and to consider how good they thought they were at them. This was to assess their level of confidence in their academic activities at that time. It used a six-point Likert scale, which started with *very good* and ends with *no idea what it means.*

Table 3.7.: Section 5 of the questionnaire focusing on participants' levels of confidence.

Section 5	**Academic activities "I am good at..."**
5.1.	I am good at organising myself for study
5.2.	I am good at using my study time well
5.3.	I am good at thinking creatively
5.4.	I am good at solving problems
5.5.	I am good at reading for academic purposes
5.6.	I am good at actively listening to others
5.7.	I am good at searching for information
5.8.	I am good at making and using notes
5.9.	I am good at making good use of lectures and taught sessions
5.10	I am good at participating in groupwork and seminars
5.11	I am good at making presentations
5.12	I am good at managing writing tasks
5.13	I am good at writing essays and using academic skills
5.14	I am good at writing reports
5.15	I am good at writing a dissertation
5.16	I am good at writing reflective assignments
5.17	I am good at completing a research project
5.18	I am good at avoiding cheating and plagiarism
5.19	I am good at citing sources and writing references
5.20	I am good at using numbers in assignment
5.21	I am good at using technical language
5.22	I am good at using computer skills for academic work
5.23	I am good at thinking critically and analytically
5.24	I am good at evaluating my own and others' arguments
5.25	I am good at developing memory skills

5.26	I am good at taking exams
5.27	I am good at evaluating my work

The self-descriptive questionnaires were developed using the Online Surveys platform (formerly known as Bristol Online Surveys). This also allowed for their on-line distribution and provided an immediate analysis of the data.

3.6.1.4. The purpose of each questionnaire

The sections above were used to create the three self-descriptive questionnaires that were used to collect the quantitative data at three points across the participants programmes. The timing of these is in the table below:

Table 3.8: The general timing of the questionnaire data collection

	Time of data collection
Self-descriptive Questionnaire 1 (SDQ1)	• Semester one (approximately 5 weeks into the first semester)
Self- descriptive Questionnaire 2 (SDQ2)	• Semester two ((approximately 5 weeks into the second semester)
Self-descriptive Questionnaire 3 (SDQ3)	• End of course after all academic work completed

3.6.1.5. The first self-descriptive questionnaire (SDQ1)

The purpose of the first self-descriptive questionnaire was to consider the type of academic activities the participants were used to on their UG course, the type of academic activities they thought they needed on their PGT course, and how good they thought they were at each activity. These questions were aimed at contributing a view of the landscape of participants' previous experiences and their perceptions of their capabilities at the start of their courses. In addition to these questions, biographical questions were required that assisted with establishing general data about the participants' identity and for establishing commonalities among the participants. Originally, these were going to form the first section of the self-descriptive questionnaire, but Dörnyei & Csizer (in Mackey & Gass, 2012:78) suggested these types of questions should go at the end of the self-descriptive questionnaire. This is to avoid the task appearing too off-putting in the first instance. These authors also provided useful information on the importance of piloting the research questions.

3.6.1.6. The second self-descriptive questionnaire (SDQ2)

The purpose of this self-descriptive questionnaire was to ascertain the participants self-assessment of their skills mid-way through their second semester, and to consider if there

had been any changes in how they felt about their abilities and their level of confidence in completing them. It was shorter than the first questionnaire with only three sections. The sections regarding UG experience (Section 3 in wave one) and what they thought they needed to complete on their PGT courses (Section 4) were removed, leaving Section 1, the twelve skills statements focusing on what the participants thought they "could" do, Section 2, the three negative statements reflecting on feelings, and finally, Section 3, asking students to reflect on how "good" they thought they were at the skills listed. This section was previously Section 5 in the first questionnaire.

3.6.1.7. The third self-descriptive questionnaire (SDQ3)

The final questionnaire was mostly the same as SDQ2, although the tenses were changed to direct the participants to reflect on their abilities and level of confidence in relation to the same listed academic activities, but viewing them from the end of their courses, after they had completed all their work. It also had the addition of some open questions at the end of the self-descriptive questionnaire. These questions were the same as some of the final interview questions, which allowed the participants the opportunity to provide an element of qualitative data (see below). The purpose of this was to see if the information given in the semi-structured interviews was the same as relayed in the interviews. Repeating the self-descriptive questionnaire for the third time was to track any changes of opinion in abilities and confidence.

<u>Open questions in the final questionnaire</u>

- If you could start the course again, what would you do differently?
- What advice would you give to a student coming to study on your course next year?
- Is there anything you wished you had known in advance of coming to study on your course?
- Are you satisfied with how you have done on the course? Please explain why/why not.

3.6.2. Design of the semi-structured interview questions

One of the main differences between this research into ASC and previous research was the addition of the qualitative semi-structured interview research questions. Semi-structured interviews were chosen as a means of adding more in-depth data, as has already been mentioned. The use of interviews takes research into ASC one step further than previous research in the area.

The interviews were timed to take place after the completion of each self-descriptive questionnaire. This is shown in Table 3.9. below.

Table 3.9: The timing of the semi-structured interviews

	Timing of data collection
Semi-structured interview 1	• **Semester one** • Approximately 5 weeks into the first semester and after the completion of SDQ1
Semi-structured interview 2	• **Semester two** • Approximately 5 weeks into the second semester and after completion of SDQ2
Semi-structured interview 3	• **End of course** after all academic work completed and after the completion of SDQ3

3.6.2.1. The first semi structured interview questions

The focus of the first set of questions in wave one was in relation to the academic activities they had completed in the past, and the tasks required of them on their current postgraduate course, which mirrored the self-descriptive questionnaire questions. It also asked them about their definition of success, aims for completing the course, their strategies for completing their work and their level of confidence. As already stated, it was aimed at providing more in-depth data and to further investigate students' perceptions of themselves. The questions were designed to be used as prompts for a conversation, which formed the semi-structured nature, as opposed to fixed questions, and expected answers. The first set of question prompts for discussion and conversation are listed below.

First set of interview questions

1. Tell me what type of tasks (academic activities) you were required to complete on your undergraduate course?
2. How well do you feel you could complete them? Why/why not?
3. How did you compare to the other people on the course? Did you do well or not compared to others? Why?
4. What are the differences between the tasks you have to do on your current PGT course, compared to your UG course?
5. Tell me which skills you think you are good at and which you are not so good at? Why do you think that you are good/ not so good at them?
6. Do you like studying? Why/why not?
7. Tell me what your aims are for completing the course, are they to get the best grades or just to pass the course? Why is that?
8. Do you have a strategy for how you will complete the work required? How did you decide this?

9. What is your level of confidence in your abilities to complete the tasks (academic activities) required on a PGT course? Why/ why not? Where does that confidence or lack of confidence come from?
10. If you are not confident or think you could do better, what could assist with this?

3.6.2.2. The second semi structured interview questions

The second set of semi structured interview questions were designed very much like the SDQs, to repeat what was asked in the first wave, to assess changes in the participants self-perception. The second interview, also like the SDQ2, omitted specific questions about UG academic activities and a definition of success. The UG academic activities were included in wave one to ascertain previous academic experiences, to help understand their background and potential knowledge of the requirements of studying for their PGT programmes. Success was not specifically asked about again, as this was originally used to access their reflections at the beginning of their courses, to see if their idea of success, linked to university success or something other, unconnected to academia. This links to the research question concerning self-belief and confidence.

The second interview focused on reflection of the work they had completed so far and how well they thought they were doing, whether the experience was what they expected, the feedback received, which academic activities they thought they were good at, how they felt about studying at midway point, their strategy for completing the remaining work, aims for completing the course and their level of confidence at that point, and what they would do differently if they could start again. The purpose of repeating most of the questions from interview one was an attempt to assess any changes when the data was compared with the wave one data. This was aimed at extending their reflections on their experiences of being an international student, and to begin to track any changes in their reflections in relation to their ASC and potential reasons for them. The question prompts for the second conversation are below.

<u>Second set of interview questions</u>

1. You are halfway through your course; how do you feel about the work you have completed?
2. Is it what you expected?
3. Have you had any feedback on your work and any results? What did you have to complete? What did they say and what did you get?
4. How do you feel about those?
5. After completing the work so far and after some feedback, which skills (academic activities) do you think you are good at, and which are you not so good at? Why do you think that you are good/ not so good at them?

6. How do you feel about studying at this point in the course?
7. Tell me what your aims are for completing the course, are they to get the best grades or just to pass the course? Why is that? Has this changed?
8. Do you still have a strategy for how you will complete the work required? How did you decide this?
9. What is your level of confidence now in your abilities to complete the tasks (academic activities) required on a PGT course? Why/ why not? Where does that confidence or lack of confidence come from?
10. If you could start again, is there anything you would do differently and why?

3.6.2.3. The final semi-structured interview

The final semi-structured interview questions asked the participants to reflect on their whole PGT experience once the course had ended. They were again asked how they felt about the work they had finished, if it was what they expected, type of assignments, feedback received, which skills they thought they were good at, if their opinion of their skills had changed over the course, the strategy for completing the work, level of confidence and what they would change if they started the course again. In addition, they were asked what advice they would give to a new student about to start the course, whether they were pleased with what they had done and if they would choose the course again if they had not already taken it, and finally for any other comments. These were compared with their individual responses from the previous two waves of data collection to see what themes emerged as part of the emergent grounded theory approach, and to further track any changes in thinking, and possible reasons for these.

Final set of semi-structured interviews

1. Now that you have finished the course, how do you feel about the work you have completed?
2. Is it what you expected?
3. What type of assignments did you have to do?
4. What feedback did you get on your work and what were the results of your assignments?
5. How do you feel about the final outcome of the course and the work you did?
6. After completing the course, which skills (academic activities) do you think you were good at, and which were you not so good at? Why do you think that you were good/ not so good at them?
7. Do you think your opinions of your academic skills changed over the time you were on the course? Why/why not?
8. If you had a strategy for how you would complete the work required did it work? Why/why not?
9. What is your level of confidence now in your abilities to complete the tasks (academic activities) that were required on a PGT course? Why/ why not? Where does that confidence or lack of confidence come from?
10. If you could start again, is there anything you would do differently and why?

11. If you were to give advice to students studying the course next year, what would you advise? Why?

3.6.2.4. Limitations

All this information contributed to finding answers to the research questions based on what emerged from the responses to the interview questions. There were some potential limitations to consider. A possible concern was whether the participants' responses were accurate and honest, but this did not seem to have been a problem as there were three interviews and the participants' data could be triangulated for consistency and validity. This also applied to whether they could recall events well that they were relating, again the details were supported by use of more than one interview, which reaffirmed their recollections.

Another issue was the chance that the students withdrew or did not attend the interviews. This only occurred with one participant, who did not want to attend the final interview. They did however, complete the final questionnaire, which included some open questions to mirror those in the interviews. These were completed, although there was no opportunity to delve deeper as was possible with the other interview participants.

A further possible issue of semi-structured interview is people may recount details aimed to please the investigator or be selective in what they say. The positive aspect of this is that the conversational nature of semi-structured interviews can allow for changes of direction and may provide new emergent themes. By nature, the questions were open, but they also needed to produce the type of data that contributed to answering the research questions. This is where the researcher is part of co-creating and co-constructing the data by guiding the discussion to create the most useful information from which to extract the emergent data. This has the potential for manipulation, to steer the participants to specific responses, but in this instance, they were encouraged to share their personal perceptions of their lived experience. In relation to the participants and interviewer, Howell (2013:198) states "...interviews involve social dynamics, and these will determine and mould the knowledge and understanding accrued."

Use of language may also have been a difficulty for some of the participants as English was not their first or only language. However, most had been educated in English or using English on their previous courses. It was still a necessary consideration as their level of English was not all the same and may have impeded their responses compared to

responses given in their main language. No special measures were applied, although clarification and rewording were used if a language issue did arise in the interviews. The SDQs were found to be very clear by the pilot participants and therefore no adaption was considered necessary.

By nature, the questions were asking the participants to reflect on their experiences and themselves. Therefore, this may have been a prompt to alter their perception of what they had experienced. This is why the interviews were repeated over time to track potential changes, which could have been inspired by their reflections due to the questions asked. It is not possible to know whether the same responses would have been provided had they not been a participant and their awareness of their experiences had not been raised. This would require an experimental approach to test such a hypothesis which is outside the scope or parameters of this research.

There was a challenge to the use of interviews, when, due to the Covid pandemic we had to switch to online interviews via the online platform Teams, instead of in-person. Occasionally, the internet band width was too weak, and cameras had to be discarded. Therefore, it was more difficult to assess non-verbal communication, which felt like the loss of an important feature of the usefulness of semi-structured interviews. The non-verbal cues were inaccessible, and diminished how we could co-create the responses.

There were many potential issues with the use of semi-structured interviews with international students. However, as stated, the use of more than one interview helped to check for consistency and therefore the validity of the data provided. (See Section 3.11. below for further discussion)

3.6.3. Alternative tools

There were other tools, which had the potential to be utilised. Focus groups were an option. According to Morgan (1996:139) “the real strength of focus groups is not simply in exploring what people have to say, but in providing insights into the source of complex behaviours and motivations…” However, this research concerned Academic Self-concept, with an emphasis on ‘self’. Therefore, interviews, were considered a better means of eliciting the depth of information that was being aimed for, especially if one of the aims was to capture the voices of individuals and to encourage students to reflect on their self-perceptions of their academic activities. Interviews are thought to be the best

method for “ideas generation” (Morgan, 1996:139). Therefore, focus groups were discounted.

Another option considered was asking students to keep a journal to record their experiences, which has been a tool used for a self-concept study by Mercer (2011). However, PGT students have much work to complete, and it seemed a large imposition on their time when they have so many other things to contend with, especially the work required for reading and written assessments. They may also forget to write it, or give up, so this was also ruled out as an option as it would be difficult to keep any control over participants completing the task. Thereby affecting participation and leading to incomplete and variable amounts of data, which would be a limitation of using journals.

3.7. Ethical (Axiological) considerations

With all research it is necessary to follow the appropriate ethical procedures, including approval processes, in order not to cause harm in any form to the participants. It is therefore essential that codes of conduct are known and adhered to. Following the university online approval system, permission was sought to conduct the research. Emails were sent to all the Associate Pro-Vice Chancellor’s for teaching and learning and they all wrote back confirming permission subject to university ethical approval being granted. Ethical approval paperwork was submitted on 15th August 2018, and was approved on 6th September 2018 at the first attempt. No amendments were required.

3.7.1. Positionality

The issue of positionality of the researcher needs to be considered. Is the researcher an insider or an outsider or both (see Merriam et al., 2001) “Positionality is ... determined by where one stands in relation to the other’.” (Merriam et al., 2001: 411). Other researchers suggest there is movement beyond the insider/outsider perspectives (see: Ibrahim et al., 2023) and there are potential third and fourth possibilities of positionality. In this case, the researcher was a senior member of staff at the university. In terms of access to the students as a member of academic staff and a higher education practitioner at the university, she was in what could be considered, a position of power and privilege. However, she did not work in any of the participants’ faculties, was not involved in the teaching or assessment of the students and did not previously know or have any previous knowledge of them. In essence, although, it may appear that as a member of staff there was easy access to the students and an ‘insiders’ perspective, in reality, the researcher

had no connection to the participants other than their participation in the research. She was not advantaged by her position and was subject to the same ethical procedural clearances as any other doctoral candidate at the institution. For the purposes of the research, she was a PhD student, not a member of the student group, nor a member of their teaching team and was not using staff credentials to influence participation, nor did she have any influence on potential student outcomes. She was more of an 'outsider' than an 'insider' for the purposes of the research.

3.7.2. Languages in the research process

The participants' language capabilities and cultural backgrounds was considered during the pilot study. Assumptions were made following the pilot study and a review of the research instruments via oral feedback that use of English language was not a major issue for the respondents. Most of them had been educated using English as the medium of instruction in their home countries. Due to their positive engagement and no issues being raised in relation to language and comprehension in the completion of the research instruments, this was given little further thought. In addition, the use of English language in the context of the participants' studies also provided a common element, which contributed to the domain under investigation in the form of studying in a UK HE context, which required a certain level of competency in English to begin PG studies. This limited further consideration of multilinguistic concerns as discussed, for example, by Holmes et al. (2013). Different decisions may have been made if potential participants had struggled to complete or comprehend the research instrument questions, which may have required translation or use of experienced and well-qualified interpreters to support the research and the participants.

3.7.3. Participants' right to withdraw.

Participants were not tied to a commitment to participate in the research. They always had a right to withdraw for any reason at any time. Information concerning a students' right to withdraw was contained in the information to the participants (see Appendix 2).

3.7.4. Confidentiality and anonymity

It was important that participants were informed about how the data would be used. Issues of confidentiality and anonymity were contained in the information to students (see Appendix 2). Information students provided was used to inform the research, but they would not be named or easily identified. Pseudonyms were utilised to discuss individual

cases. This was to ensure that it was possible for the participants to speak freely, without fear of repercussion or detriment in any way, which they may have felt if they were recorded under their real name.

3.7.5. Data storage

Data was stored on password protected devices, only accessible by the researcher. Interview data was recorded on a digital recorder but then uploaded onto a secure password protected computer. These were kept in a locked single occupant room, again only accessible by the researcher. With the advent of the COVID-19 pandemic in March 2020, all remaining research was conducted online from home, using password protected devices. It was stored as per university protocol on the secure university One Drive.

3.8. Pilot study

Prior to conducting the main study, a pilot study was conducted to test the feasibility of the research plan, including the recruitment process and suitability of the questions to establish whether it would generate the data that would contribute to answering the research questions. The research was introduced to the students via a series of talks which were integrated into their in-sessional academic language skills (ALS) programmes (ALS is mandatory for international students in their first year of study and is aimed at supporting their academic skills and English language). The talk consisted of an explanation of the purpose of the study. The students then received a letter of invitation.

The participants invited to participate were a purposive sample of the programmes with the largest international student intakes in each faculty. This was to try and ensure representation from each of the four faculties. Out of a total of 185 potential participants listed as attendees at the ALS sessions targeted, 24 students completed the self-descriptive questionnaire. From these 24 questionnaire participants, 15 people volunteered to participate in the interviews. Six students finally made firm arrangements to attend an interview, and four people attended.

There was representation from all faculties for the questionnaires, but few from the faculty of Engineering and Environment (EE) and only one person from the faculty of Arts, Design and Social Sciences. However, there were very few international students overall in the latter department. The interviews lacked representation from EE, but all the other faculties were represented.

The research instruments were found to work as required. The four interview participants unanimously agreed that the self-descriptive questionnaire was clearly designed and contained clear instructions. They had no issues at all with understanding or answering the questions and did not suggest any necessary changes. There was one addition suggested, to add an “any other comments” section after each question. The interview questions demonstrated they produced the type of data that would contribute to answering the research questions.

The potential limitation identified in the pilot study surrounded recruitment of a representative sample of participants to ensure all faculties were represented. This was due to non-attendance at the interviews and the purposive sampling of one programme per Faculty. This was changed in the main investigation and broadened to all students attending ALS classes to ensure all areas were represented and to provide a wider pool of potential interview participants.

3.9. The main data collection procedure

3.9.1. Recruitment plan and sampling

The participants were recruited following a similar procedure to the pilot study. The study was introduced to them in a series of talks in their in-sessional academic language skills (ALS) sessions. The talk consisted of an explanation of the purpose of the study and the students received a letter of invitation and further details, including researcher contact information, withdrawal rights and to whom to complain if necessary (see Appendix 2). Following the brief promotional talk, all the students listed on the register for those sessions were sent an invitation email with a link to the first on-line self-descriptive questionnaire. Within the self-descriptive questionnaire was a request for further volunteers to participate in the semi-structured interviews. Ideally, it would be best to have as many responses as possible for the self-descriptive questionnaires, to gather a broad and diverse picture of the PGT students. Dörnyei & Csizer (In Mackay & Gass (Eds.), 2012) discuss appropriate sample sizes, although this is dependent on the total number of students available. They state that between 1% and 10% of the population is “the magical fraction” (2012:82). This would equate to a possible number of participants between 4 to 35, for the questionnaires, out of a possible 352 participants which was the number of students in the classes that were invited to participate in the research.

For the interviews, the aim was to have a cross section of courses, nationalities and skills sets, but too much diversity may limit the usefulness of the findings if consideration is given to wider generalisability. Qualitative research has varied in the number of participants. The number is usually less than quantitative research to allow for more in-depth investigation. It is often less than thirty, particularly in relation to purposeful sampling (Creamer, 2018). Too many participants may become unmanageable. The important consideration in respect of the numbers of participants is that meaningful data is generated that will address the research questions, which will also ensure that the data is valid.

3.9.2. Recruitment of the participants

The process of recruitment was as described above. The original plan was to start collecting the first wave of data, four or five weeks into the participants first semester of study, using the recruitment process as already outlined. This was successful, although not all students on ALS class lists attend the sessions. Therefore, there were fewer people in the sessions to recruit. The table below (3.10) shows the detailed timing of the data collection. The total number of international students at the time of the data collection period was 2,125, out of a total of 4,558 PGT students and a university population of 26,220. They formed 8.1% of the university community.

Table 3.10: Detailed data collection timings

	January or September enrolment students	**Date questionnaires opened**	**Date questionnaires closed.**
Self-descriptive Questionnaire 1 (SDQ1) (Participants Semester 1) Followed by Semi-structured interviews	January Followed by interviews. September Followed by interviews	12/03/2019 14/10/2019	26/04/2019 05/12/2019
Self- descriptive Questionnaire 2 (SDQ2) (Participants Semester 2) Followed by Semi-structured interviews	January Followed by interviews. September Followed by interviews	22/10/2019 26/02/2020	06/12/2019 01/06/2020

Self-descriptive Questionnaire 3 (SDQ3) (Participants end of course) Followed by Semi-structured interviews	Course ending summer 2020. Followed by interviews. Course ending January 2020 Followed by interviews. Course ending summer 2021. Followed by interviews	02/06/2020 15/12/2020 08/06/2021	30/11/2020 12/2/2021 31/08/2021

The first self-descriptive questionnaire (SDQ1) was to gather a broad overview, from PGT students in different faculties, about their ASC in relation to the academic activities that they were required to complete on their programmes of study. It was distributed to students online via email on 12th March 2019 and 14th October 2019 to capture participants who started their postgraduate programmes in January 2019 and September 2019. The email included the link to the self-descriptive questionnaire and the password. The self-descriptive questionnaire was open for approximately five weeks for each cohort.

The second self-descriptive questionnaire (SDQ2) was distributed with a link and password for the January start participants on 22nd October 2019 and again for the September participants on 26th February 2020. They were available for slightly longer than the SDQ1, for seven and eight weeks, respectively. Email reminders were sent out twice during the period the SDQ2 was open, to encourage more potential participants to complete it, which is why it was open for longer. There were fewer responses for the wave 2 SDQ2. There were 64 respondents in wave 1 and 22 in wave 2.

The final self-descriptive questionnaire (SDQ3) was distributed in three separate periods of time to ensure that all participants with different course endings were given the opportunity to complete it, which considered the differing lengths of the courses as mentioned above. SDQ3 was first opened online on 2nd June 2020 until 20th November 2020. It was then reopened from 15th December 2020 to 12th February 2021 and then for the final time from the 8th of June 2021 until it closed on 31st August 2021.

3.9.2.1. The self-descriptive questionnaire (SDQ) participants

There were sixty-four participants who completed SDQ1 in wave one, which included both the January and September starters. This was out of a possible total number of students, who were invited to participate, of approximately 352 PGT students. This was the total number of students who were on the attendance list of the Academic Language

skills sessions, from which they were recruited. This represents 18% of those who were invited, which was a higher number than the pilot study at 12.9%. The total comprised thirty females and thirty-four males (see Figure 3.1. below). There were twenty-three different nationalities with representation from America, Asia, Africa, and Europe (see Table 3.11. below). The participants also represented all four faculties of the university. The age range was from twenty-one to forty-seven at the start of their courses (see Chart 3.2. below). In wave two, (SDQ2) the number of participants reduced from sixty-four, due to several participants choosing not to participate in the subsequent questionnaires. It decreased to twenty-two, all of whom had completed the first questionnaire. This however, led to a reduction to eleven nationalities, but still represented the same four broad regions of the world and all four faculties, although there was only one remaining participant from the Faculty of Arts Design and Social Studies (ADSS). In wave three, there were eighteen participants remaining that had started at the beginning who completed SDQ3. Four people dropped out. Eleven different nationalities and the same regions of the world were still represented (see Table 3.12. for the change in numbers.)

Figure 3. 1: Number of SDQ participants by male/female

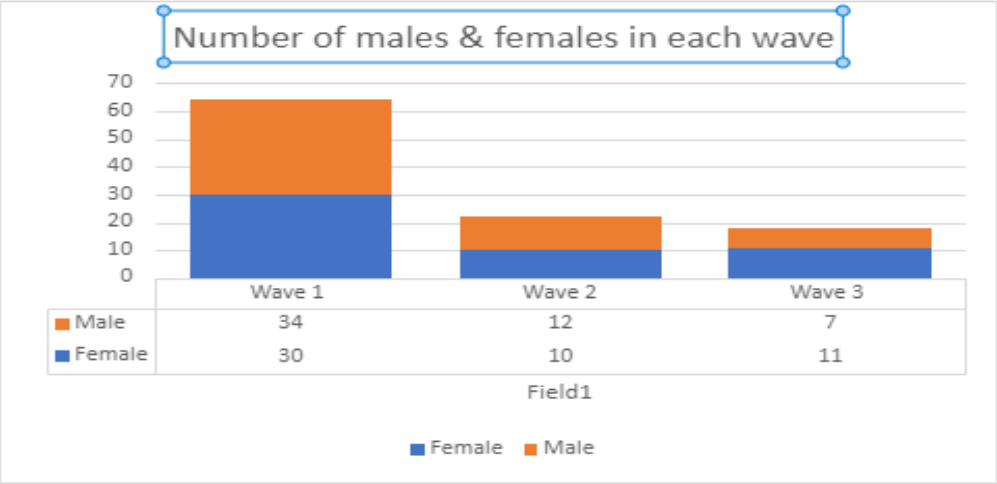


Table 3. 11.: Participants nationalities in each wave

Nationalities Wave 1		Nationalities Wave 2		Nationalities Wave 3	
American	1	American	1	American	1
Austrian	1	Bahrani	1	Bahrani	1
Bahraini	1	German	1	Czech	1

British Malaysian	1	Icelandic	1	Icelandic	1
Bulgarian	1	Indian	7	Indian	5
Czech	1	Nigerian	5	Nigerian	5
French	1	Norwegian	2	Norwegian	2
German	1	Pakistani	1	Pakistani	1
Greek	1	Polish	1	Vietnamese	1
Icelandic	1	Somalian	1		
Indian	25	Vietnamese	1		
Italian	2				
Japanese	1				
Lithuanian	1				
Myanmar	1				
Nigerian	16				
Norwegian	2				
Pakistani	1				
Polish	1				
Russian	1				
Somalian	1				
South Korean	1				
Vietnamese	1				

Figure 3.2: Participants ages at the beginning of the data collection period

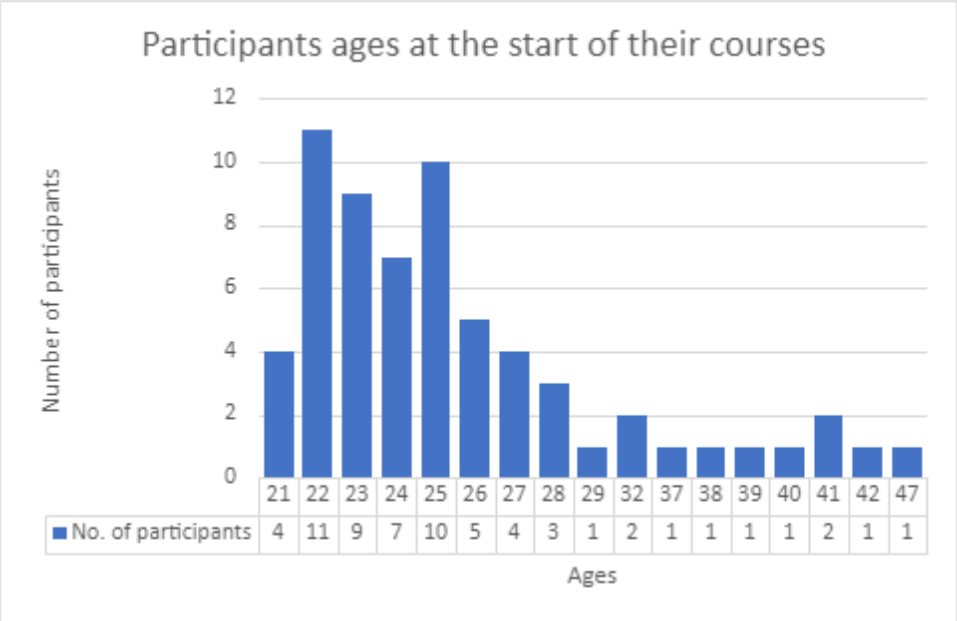


Table 3.12: The number of participants from each faculty

Number of participants each wave by Faculty			
	Wave 1	**Wave 2**	**Wave 3**
ADSS	8	1	1
B & L	19	4	4
EE	20	9	4
HLS	16	8	9

3.9.2.2. Implications of participant drop out.

The number of questionnaire participants reduced in waves two and three. This was problematic in terms of the consistency of data. It was not possible to compare the changes in responses to include all the participants in each wave. It also reduced the diversity of the results, particularly in relation to the Faculty of Arts Design and Social Sciences, the faculty with the lowest number of international students in the university. It provided the lowest number of participants in the research, which could be argued is representative of the institution. However, it does reduce the potential reliability of the findings if there was a necessity to generalise to other institutions, but the mix of students, despite the drop out was still representative of the international student body overall, and due to the consistency of the thirteen core SDQ respondents, it was also possible to rely on the data.

3.9.2.3. The interview participants

For the interviews, there were eight participants. The eight participants were purposive samples from those who volunteered to participate in the interviews following the invitation contained in SDQ1. The plan was to gather representation from all faculties, different courses of studies and a mix of nationalities. Unfortunately, despite encouragement, there were no questionnaire participants from Arts, Design and Social Sciences willing to participate in the interviews, which limited the breadth of the findings. The final mix of nationalities represented the current population of the university, which has large cohorts of PGT students from India and Nigeria, who dominated the numbers in the research and in the international student population at the institution.

They were aged between twenty-two to thirty-eight at the start of their courses, which included four males and four females (see Table 3.13. below). They were on a variety of courses across three faculties in the university. They came from five different countries, which were India, Nigeria, Bahrain, Norway, and Pakistan. They were studying a variety

of master's courses, which varied in length for either one year, eighteen months or two years. All the courses were practical in nature and not solely theoretical, teaching skills for professions.

They are identified for the purposes of maintaining anonymity as participants one through to eight, along with the letter P, to denote ‘participant’, for example, P1, P2 until P8. This means of identification is not very satisfactory, but providing false names which may invoke stereotypes or anglicising them was also not a very satisfactory means of referring to the individual participants. Unfortunately, the use of letters and numbers is dehumanising, but none of the options available were ideal. All but one of the participants participated in all three of their interviews, only P4 declined to attend her final interview as mentioned earlier but did complete the final self-descriptive questionnaire (SDQ3), which was helpful.

Table 3.13: Details of the semi-structured interview participants

Participant Pseudonym	Gender	Age	Nationality	Course	Faculty
P1	Male	23	Pakistani	MSc Construction Project Management with Building Information modelling with Advanced Practice	EE
P3	Male	23	Nigerian	MSc Microelectronics and Communications Engineering	EE
P2	Male	38	Nigerian	MSc Business with Financial Management with Advanced Practice	B & L
P4	Female	22	Indian	MSc Engineering Management	EE
P5	Female	23	Norwegian	MSc Clinical Exercise Physiology	HLS
P6	Female	28	Nigerian	MSc Business with Business Analytics with Advanced Practice	B & L
P7	Female	25	Bahraini	MSc Healthcare Management	HLS
P8	Male	26	Indian	MSc Occupational and Organisational Psychology	HLS

3.10. Data Analysis

There are different methods used for analysing mixed method research. The following section addresses how analysis of the different forms of data was conducted.

3.10.1. Quantitative data analysis

Quantitative data, as its name suggests, requires the conversion of the data, into data with numeric values. The purpose of collecting this data in this form, as already stated, is to provide a broader overview of the place and time, the context students are in, and their self-analysis of their skills required on their programme of study. Quantitative data analysis involves "inspecting the data and conducting a descriptive analysis (the mean, Standard deviation (SD) and variance of responses to each item on instruments or checklists) to determine the general trends in the data" (Cresswell & Piano Clark, 2011:206). Use of statistical software would only be necessary with large quantities of respondents. This research did not warrant use of such software given the numbers as discussed further below. The data could be analysed without the use of statistical software packages. The process used instead of software was to take the raw self-descriptive data from the questionnaire results collected via the online surveys, which were transferred from where they were created online, to Excel spreadsheets. Pivot tables of the data were then created for analysis for each wave of the data collection and compared across waves for all participants. These were converted into tables of figures and percentages. The purpose of this information was to ascertain any emerging demonstratable trends using the numerical data based on the responses for each statement. For example, how many participants agreed or disagreed. These were also converted into percentages using a calculator. The results for each statement were then compared across the three waves to look for significant changes in the numbers and the responses given. Firstly, the data examined all the wave one participants' responses regarding the academic activities they were required to complete on their UG programmes, and the academic activities they thought they needed on the PGT courses. It then focused on the participants who had completed all three questionnaires with the aim of identifying any changes of opinions, to be certain that it was the same participants who had responded. An emergent grounded theory approach was applied, and pictures gradually emerged from the pivot tables.

3.10.1.1. The limitations of the descriptive approach to quantitative data analysis

A descriptive approach to data analysis consists of "...an approach to analysis where the researcher stays close to the data, uses limited frameworks and interpretation for explaining the data and catalogues the information into themes." (Cresswell & Creswell, 2023:196). Creswell and Piano Clark (2011) also stated that it was usually "based on the type of questions or hypotheses and uses appropriate statistical test to address the questions or hypotheses." (207). Tashakkori et al. (2021) add that a descriptive approach includes "techniques for describing, summarizing and explaining a set of data. The goal is to understand the data, detect patterns and relationships and clearly communicate the results." (2021:256). They continue by stating that this alone is not usually sufficient in most research due to the researcher being "rarely interested in a particular set of data." (2021:257). Researchers often want to make generalisations based on their data samples. They want to test their questions or hypotheses and make "probabilistic claims about population data" (2021: 257). However, the purpose of this research was a voyage of discovery based on the 'particular sets of data', seeking what there was to see. It was not to test a hypothesis. It was to assess the emergent findings, the patterns they created and what they communicated about the participants.

The quantitative data analysis is therefore limited by not going further than a descriptive approach, which was thought to be 'sufficient' by the researcher to demonstrate the emergent findings, to show past experiences, changes to level of understanding and knowledge of what was required as a PG student, and changes in self-belief/confidence. A more sophisticated statistical analysis would have perhaps revealed more and provided additional validity and reliability, which could be considered if the research was repeated. In this instance, the numbers were very small to be statistically significant and due to the context, the findings were not generalisable to a wider population, it was unique to the participants and the time and place of the study. The approach that was taken was more akin to a qualitative approach as described by Tashakkori et al. (2021) where they assert that it is possible to utilise qualitative analysis techniques to quantitative data in the following way: "Qualitizing QUAN data with QUAL analysis – conversion of QUAN data into categories, profiles and narrative descriptors."

3.10.2. Qualitative data analysis

Qualitative data in the form of semi-structured interviews were recorded via a digital recorder and transcribed. This worked well, although transcription was often challenging

due to some of the words being unintelligible on the recording. It was completed by listening repeatedly to the same recordings and transcribing, just the words (without the addition of the fillers and hesitations). Transcription is described as both “interpretative and constructive” (Lapadat & Lindsey,1999:72). It is a form of interpretive analysis, much the same as the “contextualized interpretations” that take place when having a conversation (ibid.). The transcriber can choose what is represented in the transcription and is therefore subject to their interpretation. It is representational rather than a complete written record of the conversation (see Lapadat & Lindsey, 1999). Originally, the process adopted was by hand-writing the transcriptions and then typing them into the computer, but it was an exceedingly time-consuming process. This was changed to direct transcription from the recording by typing straight into the computer, which was a more efficient use of time.

3.10.2.1. Thematic analysis

Thematic analysis of the data was conducted. In simple terms, thematic analysis according to Braun and Clarke (2022: 4) “...is a method for developing, analysing and interpreting patterns across qualitative datasets...”. It involves identifying and highlighting reoccurring information (Teddlie & Tashakkori, 2009). Creswell and Piano Clark (2011) assert that: “When discussing a theme or category, the basic idea is to build a discussion that convinces the reader that the theme or category emerges from the data.” (2011: 209)

The themes for this research and the coding were devised in two ways. Firstly, the main themes that were identified from previous ASC research as discussed in the Literature Review, formed the starting point for the codes used. These codes included comparison to others, dimensional comparison, achievement, self-belief/confidence, and perception of self in relation to these. Other themes and codes emerged from the data and were “dominant informational features or characteristics of the phenomenon under study” (Tashakkori et al., 2021:249). This included common issues reported by the participants, such as reactions to group work, the creation of self-support structures, the need for and use of feedback, and attitudes to self and others. Any items that were raised by only one participant and were not relevant to or contributed to understanding their ASC, or ASC generally was not necessarily coded or may have been coded and then excluded on review of the data.

The approach used for the analysis involved transcribing each interview and reading through the transcriptions to gather a general overview of the contents. The transcriptions were copied and uploaded into an NVivo data analysis file. These were created to help organise the data via the different thematic codes as described above.

This approach was mainly inductive by looking for evidence of patterns and themes in the data from a bottom-up perspective. This process was as described by Cresswell and Cresswell (2023:194) “This inductive process illustrates working back and forth between the themes and database until the researchers have established a comprehensive set of themes”. A deductive process was also used, as Cresswell and Cresswell again convey “...the researchers look back at their data from the themes to determine if more evidence support each theme or whether they need to gather additional information.” (ibid.) There was constant reviewing of the data, which was built upon and added to when the next wave of data was available for analysis.

Written summaries of the individuals’ interviews were also created as an additional means of understanding and becoming better acquainted with the data, and for further identifying any significant emerging issues as part of a grounded theory approach to the research. There was no specific analytic framework used due the emergent grounded theory approach, which relied on what emerged from each wave of data that enhanced or elaborated on what had also emerged in the previous waves’ findings.

3.10.3. Mixed method approach to analysis

This study used a mixed method approach, combining both sources of quantitative and qualitative data, by cross analysing the data from both to support and strengthen the findings. The use of more than one type of source, forms an element of triangulation as previously discussed. Data analysis was started following each wave to see if there were any trends or commonalities emerging from both types of data. However, the full picture could only be found once all the data was gathered, and it was analysed in its entirety to see what emerged and how these addressed the research questions posed. This was achieved using an emergent grounded theory approach by going back and forth between the data and comparing results across the waves. It required much interaction with the results to establish what was emerging (see Charmaz 2014).

3.11. Issues of validity and reliability

Teddlie & Tashakkori (2009:209) discuss the questions a researcher must consider in relation to data quality. They state: “The first question concerns *measurement*

validity/credibility: Am I truly measuring/recording/capturing what I intend to, rather than something else?" They then ask whether this is "consistent and accurate" (2009:209). Creamer (2018:24) defines validity as:

> ...a term used in both quantitative and qualitative research to refer to strategies that are used during data collection and analysis that confirm the credibility, confirmability and justifiability of the findings and inferences drawn at the conclusion of the study.

According to Cresswell and Piano Clark (2018:249) validity as well as quality has been "one of the major issues in mixed methods research". Some researchers think the term '*validity'* is now "meaningless" due to overuse (Cresswell & Piano Clark 2018:250). Debates on this are ongoing. For mixed method research the use of triangulation is thought to provide "congruent validity" as discussed by Jick (1979) in his research on mixed methods and triangulation. Congruent validity is when the two or more methods provide congruent or comparable results, which enhance confidence in results and their credibility. This research provides evidence of congruent validity with the use of two different methods to investigate the same set of participants over the duration of the data collection, despite overall numbers declining over time. These formed the consistent basis of the analysis and the ability to triangulate the data as discussed above. My role in this process was a co-creator, producing and documenting records of the participants' experiences as provided.

3.12. Chapter summary

This chapter has provided details of the research philosophy and theoretical perspectives that underpin the project, which are thought to represent two contrasting worldviews. By combining methods, it takes a pragmatist view on what works to address the research questions posed, rather than a focus on the different types of reality and knowledge that form the foundation of other approaches to research. It discussed the rationale for the research design and the context of the research, investigating the experiences of studying, and the Academic Self-concept of a diverse cohort of international postgraduate students, on taught courses at one HEI. The creation of the research instruments was discussed, and the reasons for their use, which together formed the mixed method approach to the study. Ethical considerations were provided and followed, and the instruments and processes were tested through a pilot study, leading to reflection on the process of recruitment and a change of plan in the approach to the recruitment of participants. The main data collection process was presented, including how the

participants were recruited, who they were, the timing of the different waves of data collection and any limitations. This was followed by a discussion of the process of the data analysis using two different methods, based on the nature of the type of data collected, quantitative or qualitative. Issues of reliability and validity were also considered in the context of a mixed method approach, rather than from the perspective of the individual methods and the world views they represent. This study has employed a different approach to the previous research methodology using ASC as a lens, which was mainly quantitative in nature. The intention was to add deeper knowledge of PGT students' experiences at a UK HEI, which may not have been illuminated as well as it could have been by sole use of quantitative methods, and the single worldview of most of the previous research into ASC. The next two chapters will present the findings of the research, starting with the data from the questionnaire participants.

Chapter 4: The findings: Self-descriptive questionnaires

4.1. Introduction

This chapter will provide an overview of the three waves of the self-descriptive questionnaire (SDQ) findings. The questionnaires were designed to capture the participants' self-perceptions of their abilities to complete a variety of academic activities. The three waves relate to the three points of time on their PGT programmes (i.e., the start, middle and end of the participants' courses) as detailed in Chapter Three (see Table 3.10.). The chapter begins with details relating to the participants in each wave, including their nationalities, ages, and programmes of study. Then it highlights the participants' UG academic activities. This is followed by an overview of the academic activities (also referred to as study skills) they thought were required on their PGT courses when they were a few weeks into the start of their programmes. It then moves to present the results from the participants who completed all three questionnaires, with the data from each wave considered separately. It examines their self-perceived ability to complete the listed academic activities and how this changed over the duration of their programmes. It also considers their levels of uncertainty in relation to the listed statements, to identify the participants' levels of knowledge and confidence in their abilities to complete the academic activities. It shows how these levels changed over the period of their programmes of study. Finally, it considers three negatively posed statements and tracks any changes in opinions related to these. It concludes with a chapter summary.

4.2. The participants

This section presents an overview of the participants. The number of participants in wave one includes all the participants who responded to the initial survey (SDQ1). The focus then moves to consider the responses of the participants who completed all three self-descriptive questionnaires (SDQs). The following provides details of the participants nationalities, ages, and courses of study.

4.2.1. The wave one participants.

The participants were purposefully recruited (as outlined previously, see Chapter 3.9.1.) from all four faculties at the university. This was to incorporate a variety of nationalities by inviting participation from the diverse range of international PGT students that chose

to study at the university. This was aimed at gaining a broad overview of their knowledge and experience of academic tasks and activities. Figure 4.1. provides the overview of the nationalities of those who participated. Twenty-three different countries were represented. The country with the most students was India with twenty-five participants, followed by Nigeria with sixteen. Italy and Norway had two participants each, while the remainder were represented by one person each. This is representative of the PGT population, which includes large cohorts of students from India and Nigeria and small numbers of students from other countries.

Figure 4.1: The Wave One Number of Participants (%) and Nationalities

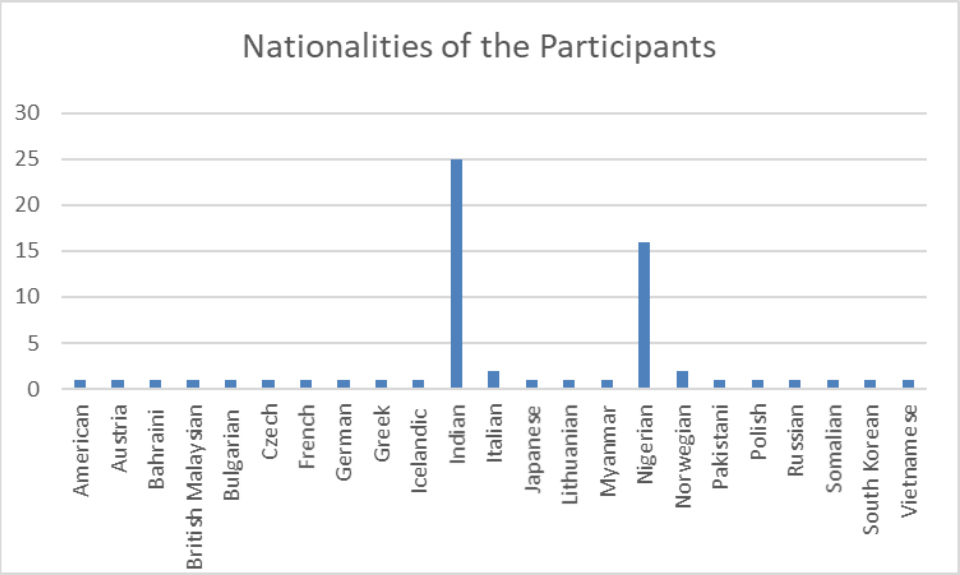


Figure 4.2. below shows the spread of ages of all the participants. Their ages ranged from 21 to 47 at the start of their courses, with the majority in their mid to early twenties. (The mean age was 26.3, the median 24.) There were very few students in their thirties and forties and non-aged forty-eight and over. This is typical for PGT students in general.

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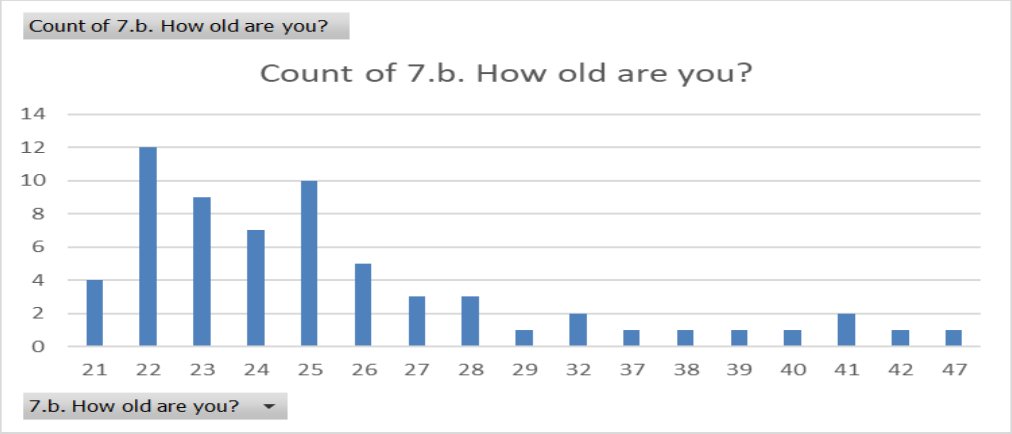
Figure 4. 2: Participants Ages



4.2.2. Participants' programmes of study

The participants were studying on a wide variety of courses in all four faculties. The figures below provide an overview of the courses and the number of participants organised by faculty. Figure 4.3. shows the variety of PGT courses taken by participants who completed the first questionnaire (SDQ1) in the Faculty of Arts Design and Social Sciences (ADSS). Half of the total students were studying for a MA in Fine Art Conservation. This imbalance in representation of courses is not an issue, as together they provide representation of creative courses, requiring some differing academic activities to the other faculties.

Figure 4.3: Faculty of Arts, Design and Social Sciences: Number of Participants and Courses

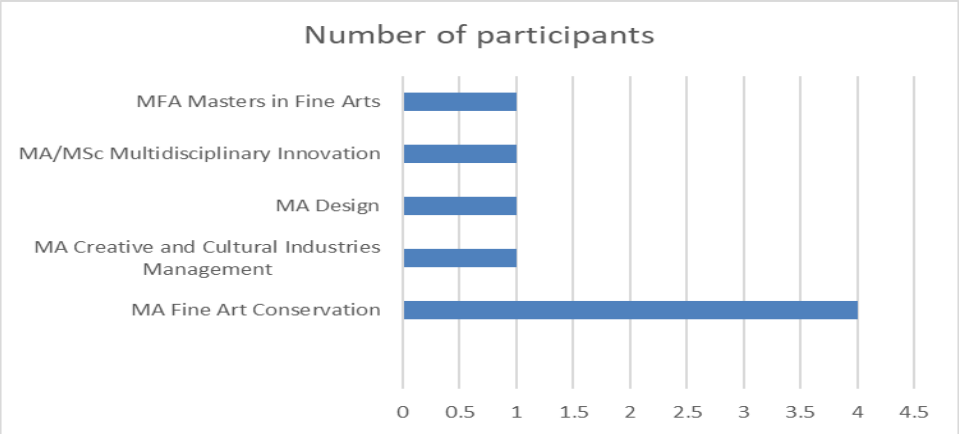
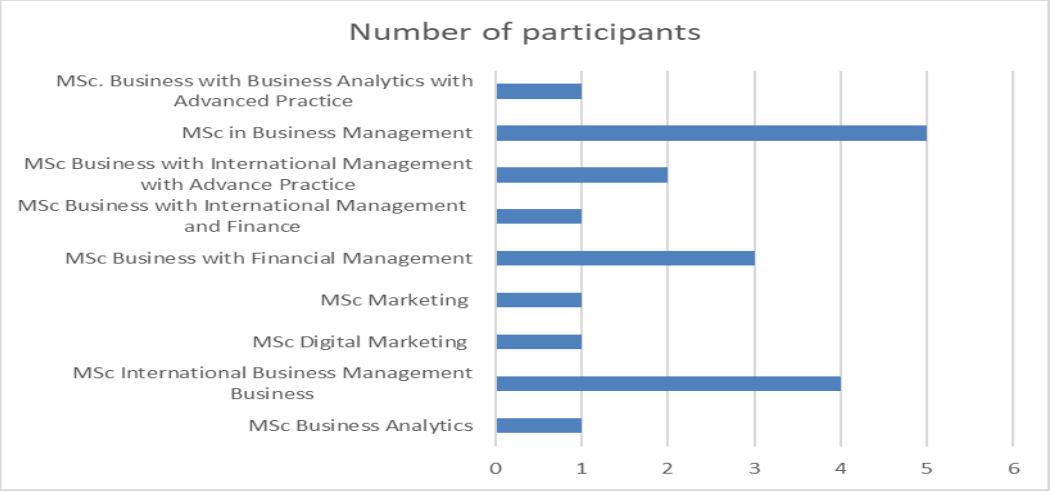


Figure 4.4. below presents the total number of PGT participants in the Faculty of Business and Law (B & L) and the courses they were studying. Most of the participants in this faculty were studying for some type of Business Management qualification, which may

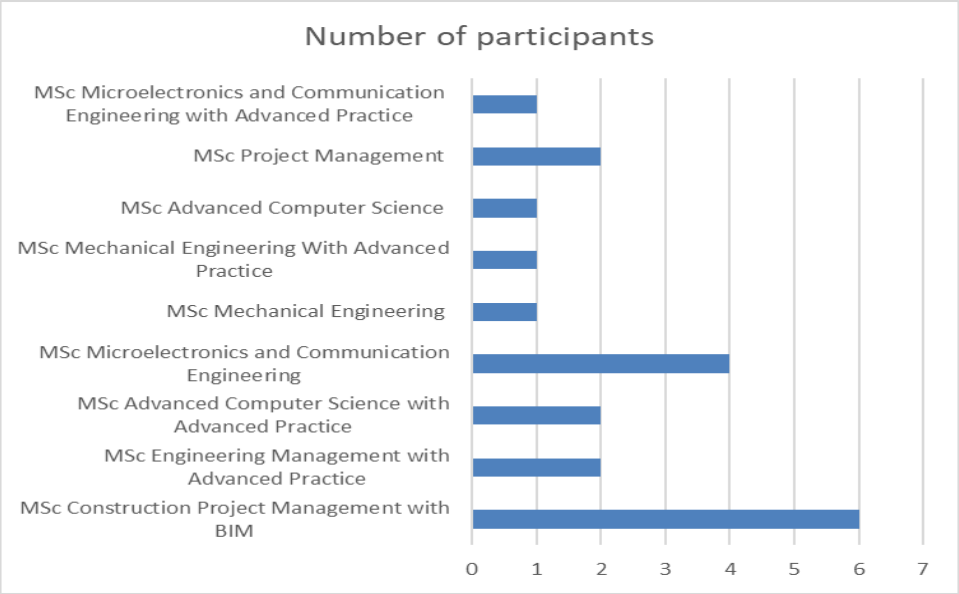
require different types of academic activities to many of the PGT students in ADSS studying Conservation of Fine Art, for example.

Figure 4. 4: Faculty of Business & Law: Number of participants and courses



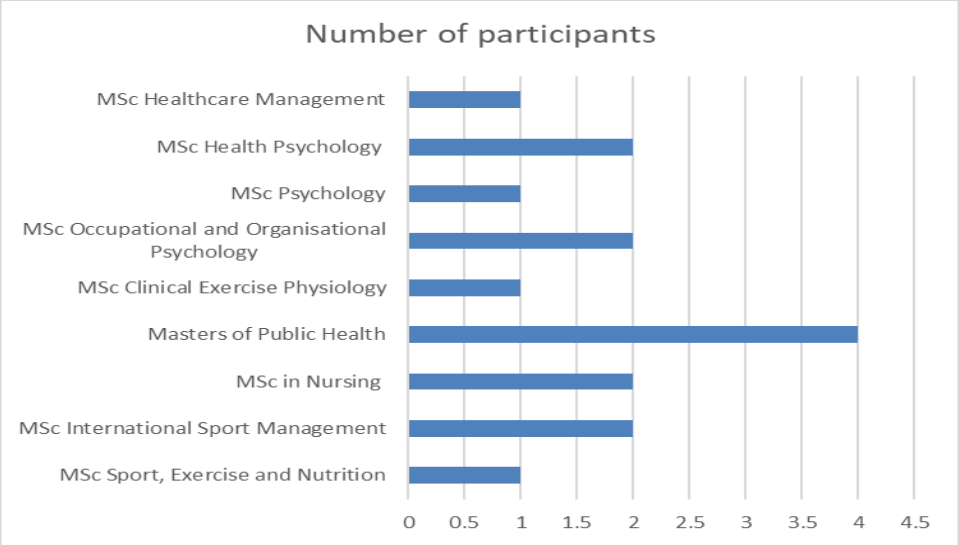
In the Faculty of Engineering and Environment (EE) the SDQ1 participants were on courses requiring the development of technical skills, such as computing, engineering, and construction. Half of these programmes, as shown below in Figure 4.5., were also related to management, like some of the participants in B & L.

Figure 4. 5: Faculty of Engineering & Environment: Number of participants and courses



The SDQ1 participants in the Faculty of Health and Life Sciences (HLS) were studying a variety of practical health related PGT courses. Some of these courses were also management related as shown in Figure 4. 6..

Figure 4. 6: Faculty of Health & Life Sciences: Number of participants and courses

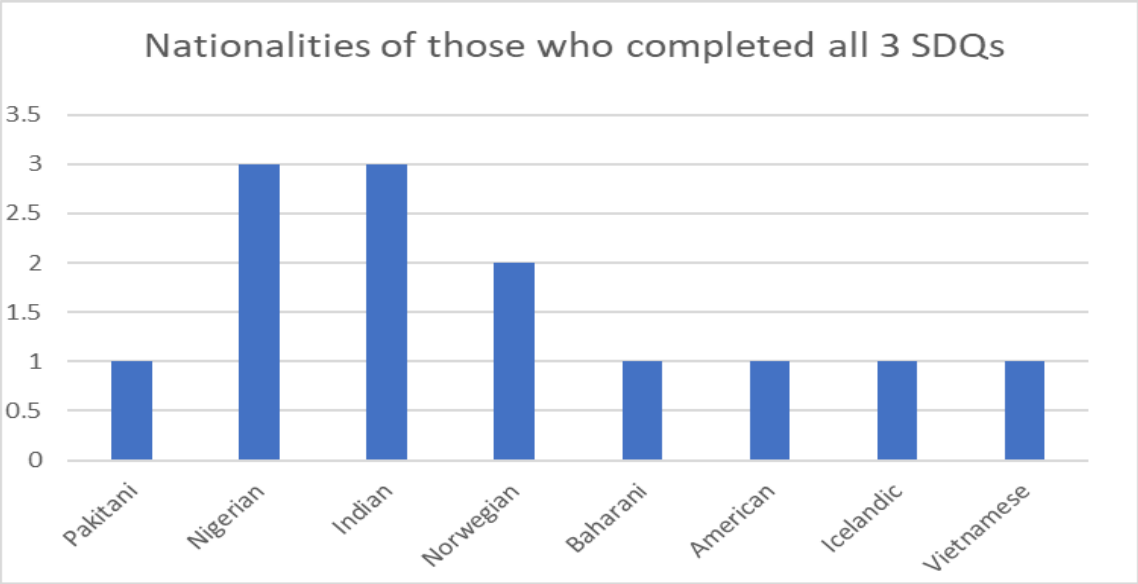


Most of the courses of the SDQ participants were designed to prepare them for future employment, which the completion of academic activities facilitates. Therefore, these academic activities needed to be understood and applied by the PGT students.

4.2.3. The core participants

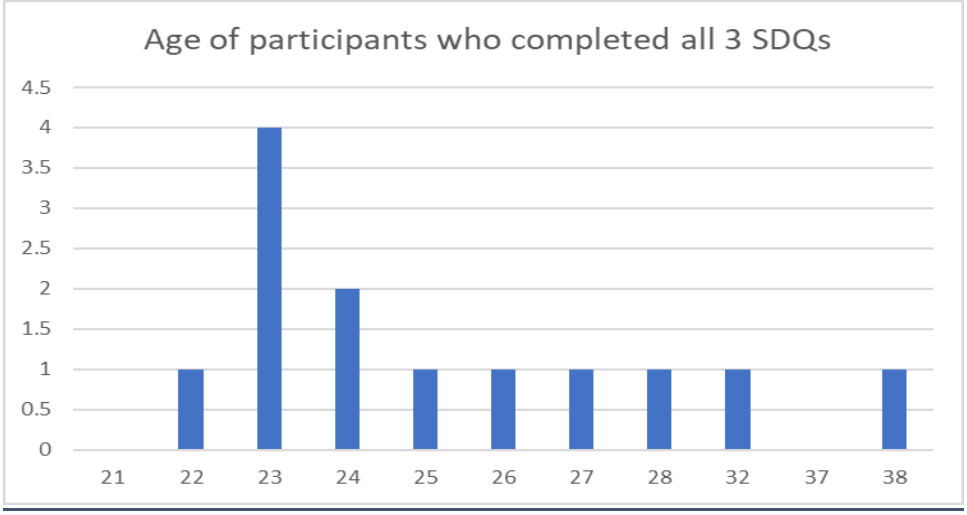
There were thirteen out of the initial sixty-four participants who participated in all three waves of data collection as mentioned above. Figure 4.7. below shows the eight nationalities of the thirteen participants. Nigeria and India remained the highest providers of participants, followed by Norway with two, with the rest providing one representative each. The countries include three Northern Europeans, six participants from very different regions of Asia, three Nigerian Africans and an American.

Figure 4. 7. : The nationalities of the participants who completed all 3 SDQs.



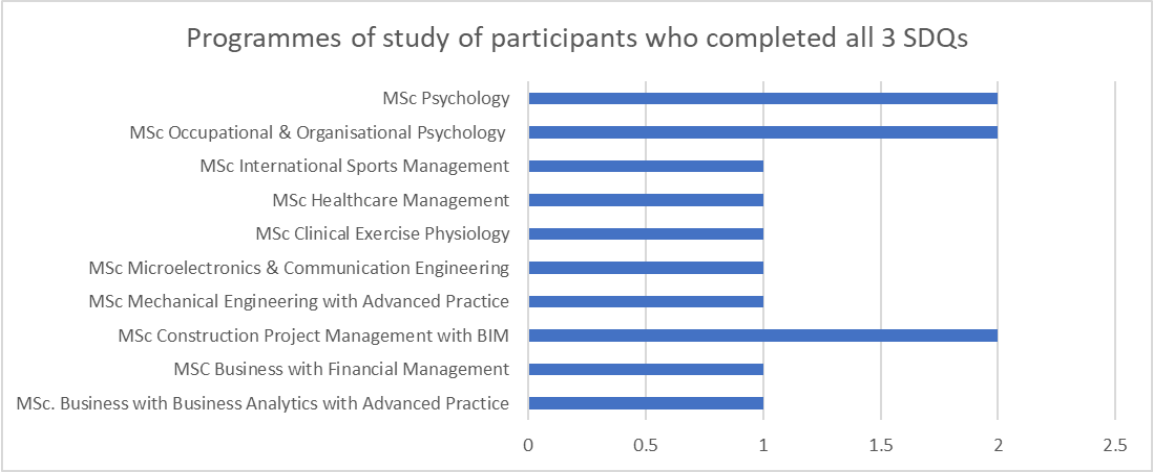
The participants who completed all the SDQs were aged from 22 to 38 (see Figure 4.8.), which makes the median age 24 years. The mean age is slightly lower in comparison to the data above at 26 in SDQ1.

Figure 4. 8: The age of the participants who completed all 3 SDQs.



The thirteen participants were on ten different programmes across three out of the four faculties (see Figure 4.9. below). There was no representation from Arts, Design and Social Sciences in these results compared to the wider data. There were seven participants from the Health and Life Sciences, four from Engineering and Environment and two from Business and Law

Figure 4. 9: The Programmes of study of the participants who completed all 3SDQs.



4.2.4. Section 1 summary

The number of participants reduced over the duration of the waves of data collection. Based on this, it was decided for wave one, to include all the data for the participants who completed the first questionnaire in relation to their previous UG experiences and their opinions of what they thought was required of them to study at PGT level. This was to ensure a broad purposeful sample representative of the variety of PGT students the university attracts in general. Then, the focus for the remainder for the SDQs turned to the core group of thirteen who completed all the questionnaires. This was to track any changes more easily for triangulation of results as discussed in Chapter 3, Section 3.4.5. The following sections focus on those who completed SDQ1 and will provide an insight into their opinions.

4.3. The type of tasks required on UG courses.

SDQ1 asked the students to consider the academic activities they completed on their UG courses, and the type of academic activities they thought were required on their PGT courses using self-assessment of their capability to complete them. The section below will consider the first set of SDQ results, which were administered to the participants via email a few weeks into the start of their first semester of study (see Chapter 3, Section 3.9.1.)

The participants had a variety of different academic activity requirements on their UG courses in the various countries in which they had previously studied. Section 3 of SDQ1

used a 5-point Likert scale ranging from *always* to *never.* It asked the participants to consider the type of academic activities they were required to complete on their UG courses. This was to assess if there were significant differences between what they were used to, and if there were types of academic activities, they subsequently encountered on their PGT programmes, which they had not previously engaged with. The findings below (see Table 4.1.) present the list of academic activities, which are arranged from highest to lowest number of participants for academic activities a*lways* or *often* completed on their UG courses.

Table 4. 1: Academic activities the participants thought they *always* and *often* needed on their UG courses.

Section 3, Academic activities *always* and *often* required on UG courses from highest to lowest percentages		**Number of participants**
1	3.18. Avoiding cheating/plagiarism	55/64 (86%)
1	3.26. Taking exams	55/64 (86%)
2	3.7. Searching for information for assignments	54/64 (84%)
3	3.22. Using computer skills for academic work	53/64 (83%)
4	3.6. Actively listening to others	51/64 (80%)
5	3.27. Evaluating my work	50/64 (78%)
6	3.10. Participating in groupwork and seminars	49/64 (77%)
7	3.5. Reading for academic purposes	48/64 (75%)
8	3.4. Solving problems	47/64 (73%)
8	3.9. Making good use of lessons and taught sessions	47/64 (73%)
8	3.19. Citing sources and references	47/64 (73%)
8	3.21. Using technical language	47/64 (73%)
8	3.23. Thinking critically and analytically	47/64 (73%)
8	3.25. Developing memory skills	47/64 (73%)
9	3.12. Managing writing tasks	46/64 (72%)
10	3.1. Organising myself for study	45/64 (70%)
11	3.24. Evaluating my own and others' arguments	44/64 (69%)
12	3.11. Making presentations	43/64 (67%)
13	3.17. Completing a research project	42/64 (66%)
14	3.2. Using my study time well	41/64 (64%)
15	3.3. Thinking creatively	40/64 (63%)
15	3.20. Using numbers in assignments	40/64 (63%)

16	3.8. Making and using notes	37/64 (58%)
17	3.15. Writing a dissertation	33/64 (52%)
18	3.13. Writing essay using academic conventions	32/64 (50%)
19	3.14. Writing reports	28/64 (44%)
20	3.16. Writing reflective assignments	24/64 (38%)

The academic activities that most of the participants thought were *always* or *often* required to complete on their UG courses were *3.18. avoiding cheating and plagiarism* and *3.26. taking exams* with 55/64 (86%). Other activities that over 80% of the participants thought were necessary were *3.7. searching for information 54*/64 (84%*), 3.22. using a computer* 53/64 (53%*) and 3.6. listening to others* 51/64 (80%)

At the bottom of the table were writing related tasks, 24/64 (38%) thought *3.16. writing reflective assignments* was required. Next was *3.14. writing reports,* which was considered necessary by 28/64 (46%) of participants. Half of the participants 32/64 (50%) thought they needed to use academic conventions *(3.13.)* and 33/64 (52%) were required to *write a dissertation (3.15.).* This is reinforced when the data showing activities *rarely* or *never* required were also considered, as shown in Table 4.2. below.

Table 4. 2: Academic activities the participants thought they *rarely* or *never* needed on their UG courses.

Section 3 Academic activities *rarely* or *never* required on UG course from highest to lowest percentages		**Number of participants**
1	3.15. Writing a dissertation	26/64 (41%)
2	3.16. Writing reflective assignments	23/64 (36%)
3	3.14. Writing reports	22/64 (34%)
4	3.13. Writing essays using academic conventions	20/64 (31%)
5	3.17. Completing a research project	11/64 (17%)
6	3.19. Citing sources and references	10/64 (16%)
6	3.20. Using numbers in assignments	10/64 (16%)
7	3.12. Managing writing tasks	9/64 (14%)
8	3.2. Using my study time well	8/64 (13%)
8	3.24. Evaluating my own and others' arguments	8/64 (13%)
9	3.25. Developing memory skills	7/64 (11%)
10	3.1. Organising myself for study	6/64 (9%)
10	3.4. Solving problems	6/64 (9%)
10	3.5. Reading for academic purposes	6/64 (9%)

10	3.11. Making presentations	6/64 (9%)
11	3.26. Taking exams	5/64 (8%)
11	3.27. Evaluating my work	5/64 (8%)
12	3.3. Thinking creatively	4/64 (6%)
12	3.7. Searching for information for assignments	4/64 (6%)
12	3.8. Making and using notes	4/64 (6%)
12	3.9. Making good use of lessons and taught sessions	4/64 (6%)
12	3.18. Avoiding cheating/plagiarism	4/64 (6%)
12	3.21. Using technical language	4/64 (6%)
13	3.6. Actively listening to others	3/64 (5%)
13	3.23. Thinking critically and analytically	3/64 (5%)
14	3.10. Participating in groupwork and seminars	2/64 (3%)
14	3.22. Using computer academic activities for academic work	2/64 (3%)

The data for the academic activities that some of the participants thought were *rarely* or *never* required at the top of the table (Table 4.2. above) indicates that writing activities predominated. 26/64 (26%) participants did not, or rarely needed to write a dissertation (3.15) on their UG course. Just over a third of participants 23/64 (36%) did not or rarely used reflective writing (3.16). Likewise, writing a report (3.14) and use of academic conventions (3.13) was not considered a key necessity for their UG courses with 22/64 (34%) and 20/64 (31%) respectively believing this to be the case. Whereas, avoiding plagiarism and taking exams were thought to be the most required academic activities on UG courses, but citing sources and referencing (3.19) was considered necessary by fewer participants than avoiding plagiarism with 47/64 (73%) compared to 55/64 (86%) Use of academic writing conventions (3.13) was only thought to be required by 32/64 (50%) of participants. These activities are all closely linked, plagiarism is avoided by correct referencing and use of sources, and writing using academic conventions also incorporates correct use of source material but is slightly broader as it also refers to academic writing style, not only referencing. It is curious that there is a gap in the number of participants and the results for these similar activities.

At the bottom of the table, only 2/64 participants (3%) *rarely* or *never* used a computer (3.22) or participated in group work and seminars. 5%, 3/64 respondents were unfamiliar with critical thinking (3.23), and actively listening to others (3.6.) was *never* or *rarely* a requirement, which implies that most participants were required to complete these activities on their UG courses.

4.3.1. Summary

The results show that over one third of the participants had little to no experience of different types of academic writing requirements commonly used for assessment on PGT courses on their UG courses. These findings suggest there is an evident gap in knowledge and experience for some in the types of academic writing activities that were required on most PGT courses. There also appears to be a lack of clarity surrounding their knowledge and use of academic conventions, referencing and plagiarism due to the difference in the results for these statements.

4.4. Academic activities required on a PGT course.

Findings from Section 4 of SDQ1 show the academic activities the participants thought they needed on their PGT courses a few weeks into their first semester of study. It used the same 5-point Likert scale as Section 3 above from *always* to *never*. Table 4.3. below shows the highest chosen academic activities they thought they *always* or *often* needed on their PGT courses.

Table 4. 3: The academic activities that the participants thought they *always* or *often* needed on their PGT courses from highest to lowest number.

Section 4 Q1 Highest to lowest scoring academic activities participants thought the *always/often* need on PGT courses		**Number of participants**
1	4.23. Thinking critically and analytically	61/64 (95%)
2	4.18. Avoiding cheating/plagiarism	60/64 (94%)
3	4.22. Using computer skills for academic work	58/64 (91%)
3	4.1. Organising myself for study	58/64 (91%)
4	4.6. Actively listening to others	57/64 (89%)
4	4.7. Searching for information for assignments	57/64 (89%)
4	4.10. Participating in groupwork and seminars	57/64 (89%)
5	4.9. Making good use of lessons and taught sessions	55/64 (86%)
6	4.21. Using technical language	53/64 (83%)
6	4.24. Evaluating my own and others' arguments	53/64 (83%)
6	4.27. Evaluating my work	53/64 (83%)
7	4.3. Thinking creatively	52/64 (81%)
8	4.2. Using my study time well	51/64 (80%)
8	4.4. Solving problems	51/64 (80%)
8	4.5. Reading for academic purposes	51/64 (80%)
8	4.19. Citing sources and references	51/64 (80%)
9	4.12. Managing writing tasks	50/64 (78%)
10	4.8. Making and using notes	49/64 (77%)
10	4.25. Developing memory skills	49/64 (77%)

11	4.11. Making presentations	44/64 (69%)
11	4.20. Using numbers in assignments	44/64 (69%)
12	4.16. Writing reflective assignments	42/64 (66%)
12	4.13. Writing essays & using academic conventions	42/64 (66%)
13	4.17. Completing a research project	40/64 (63%)
14	4.26. Taking exams	39/64 (61%)
14	4.14. Writing reports	39/64 (61%)
15	4.15. Writing a dissertation	37/64 (58%)

The items shaded in yellow were chosen for both UG and PGT courses.

At the top of the table the most required academic activities most participants thought were required on their PGT courses as shown above in Table 4.3, did not all feature in the most required academic activities in relation to their UG courses in Table 4.1.. The three new additions were *4.23 thinking critically and analytically*, which came top, *4.1. organising myself for study,* and *4.10 participating in groupwork and seminars*. These appear to be consistent with the type of activities they would have been required to undertake early in their PGT courses when participating in lectures and seminars, and in the preparation for these. It is perhaps interesting to note that *4.18 avoiding cheating and plagiarism* appears in both the UG and PGT most needed activities, but writing, in which this activity would be required, does not.

It is also observable that the lowest percentage academic activities the participants thought they *always* or *often* needed on their PGT courses all relate to academic writing activities (see Table 4.3.). This was also reflected in academic activities which the participants thought were *rarely* or *never* needed on their PGT courses which can be seen below in Table 4.4.

Table 4. 4.: The academic activities the participants thought they *never* and *rarely* needed on their PGT courses from highest to lowest.

Section 4 Highest scoring academic activities *never* **or** *rarely* **required on PGT course**		**Number of participants**
1	4.26. Taking exams	20/64(31%)
2	4.17. Completing a research project	13/64 (20%)
3	4.15. Writing a dissertation	12/64 (19%)
4	4.13. Writing essays using academic conventions	10/64 (16%)
5	4.16. Writing reflective assignments	7/64 (11%)
5	4.25. Developing memory skills	7/64 (11%)
6	4.20. Using numbers in assignments	6/64 (9%)

6	4.21. Using technical language	6/64 (9%)
7	4.9. Making good use of lessons and taught sessions	5/64 (8%)
7	4.11. Making presentations	5/64 (8%)
8	4.12. Managing writing tasks	4/64 (6%)
8	4.14. Writing reports	4/64 (6%)
9	4.5. Reading for academic purposes	3/64 (5%)
9	4.8. Making and using notes	3/64 (5%)
10	4.1. Organising myself for study	2/64 (3%)
10	4.2. Using my study time well	2/64 (3%)
10	4.4. Solving problems	2/64 (3%)
10	4.18. Avoiding cheating/plagiarism	2/64 (3%)
10	4.19. Citing sources and references	2/64 (3%)
10	4.27. Evaluating my work	2/64 (3%)
11	4.3. Thinking creatively	1/64 (2%)
11	4.6. Actively listening to others	1/64 (2%)
11	4.7. Searching for information for assignments	1/64 (2%)
11	4.10. Participating in groupwork and seminars	1/64 (2%)
11	4.22. Using computer academic activities for academic work	1/64 (2%)
11	4.23. Thinking creatively and analytically	1/64 (2%)
11	4.24. Evaluating my own and others' arguments	1/64 (2%)

The highest percentages in *rarely* and *never* needed is *taking exams*, which did not feature on many of their PGT courses, written assignments were more common as forms of assessment on their programmes. This was unlike their UG course, where for many it was the principal means of assessment, which was confirmed in the interview data.

The findings indicate that some participants did not think academic activities involving writing, including dissertations, research projects, reflective assignments and use of academic conventions were considered significant at this point on their PGT courses. In fact, the choices are very similar to Section 3, academic activities *rarely* or *never* needed on their UG courses as observed above (see Table 4.2.).

4.4.1. Summary

It is evident that the data reinforces the earlier findings that many writing activities required on a PGT course were unanticipated and possibly unfamiliar to many of the participants near the start of their courses. Some even thought that many of them were not required when asked near the start of their programmes. Interestingly, there was a recognition of some differences in requirements when comparing UG and PGT study.

4.5. Self-assessment of capability of academic activities

The first section of the SDQ in all three waves, required the participants to self-assess twelve statements concerning a list of academic activities and to decide what they thought they could do at that point in their courses. It consisted of a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. The full list of statements can be found below in Table 4.5.

Table 4. 5.: SDQ Section1 List of self-assessment capability statements

Section 1	Academic activity capability statement
1.1.	I can follow lectures easily
1.2.	I can concentrate well in lectures and seminars
1.3.	I can advise other people on my course how to complete the work required
1.4.	I pay attention to my lecturers during seminars and lectures
1.5.	Most of the people on my course are smarter than I am
1.6.	I study hard to pass the course
1.7.	I participate/speak in lectures and seminars
1.8	I am confident to answer questions when asked by my lecturers in sessions
1.9.	I know what is required of me to study at PGT level
1.10.	I do not give up easily when faced with difficult questions
1.11.	I am able to do better than other students on my course in most of my modules
1.12.	I am willing to put in more effort to university study.

4.5.1. Wave one, Section 1: Self-assessment of capability

The following SDQ data presents the results for the thirteen participants who completed all three SDQs as detailed above. The results below present the statements for *strongly agree* and *agree* for SDQ1, a few weeks into the first semester of study. All the participants agreed that they *paid attention to lecturers during lectures and seminars (1.4.*), along with *1.12. a willingness to put more effort into studies*. The majority 12/13 (92%) also agreed that they *studied hard to pass the course (1.6.)* and did *not give up when faced with difficulties (1.10.).*

1.4. I pay attention to my lecturers during seminars and lectures	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	0/13 (0%)
Neither agree nor disagree	0/13 (0%)
Agree	**7/13 (54%)**
Strongly agree	**6/13 (46%)**

1.12. I am willing to put in more effort to university study	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	0/13 (0%)
Neither agree nor disagree	0/13 (0%)
Agree	**7/13 (54%)**
Strongly agree	**6/13 (46%)**

1.6. I study hard to pass the course	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	0/13 (0%)
Neither agree nor disagree	1/13 (8%)
Agree	**3/13 (23%)**
Strongly agree	**9/13 (69%)**

The results for the other statements below were varied. Three quarters, 10/13 (77%) of participants *agreed* or *strongly agreed* with *1.2. I concentrate well in lectures and seminars*. This was followed by two statements with 9/13 (69%) which were *1.7. I participate/speak in lectures* and seminars and *1.9. I know what is required of me to study at PGT level*. *1.3. I advise other people on my course how to complete the work required* had 8/13 (62%), and *1.8. I am confident to answer questions when asked by my lecturers in sessions* received 7/13 just over 50%.

1.2. I concentrate well in lectures and seminars	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	2/13 (15%)
Neither agree nor disagree	1/13 (8%)
Agree	**6/13 (46%)**
Strongly agree	**4/13 (31%)**

1.7. I participate/speak in lectures and seminars	
	Wave one Number of Participants (%)
Strongly Disagree	1/13 (8%)
Disagree	3/13 (23%)
Neither agree nor disagree	0/13 (0%)
Agree	**5/13 (38%)**
Strongly agree	**4/13 (31%)**

1.9. I know what is required of me to study at PGT level	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	2/13 (15%)
Neither agree nor disagree	2/13 (15%)
Agree	**5/13 (38%)**
Strongly agree	**4/13 (31%)**

1.3. I advise other people on my course how to complete the work required	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	2/13 (15%)
Neither agree nor disagree	3/13 (23%)
Agree	**7/13 (54%)**
Strongly agree	**1/13 (8%)**

1.8. I am confident to answer questions when asked by my lecturers in sessions	
	Wave one Number of Participants (%)
Strongly Disagree	0/13 (0%)
Disagree	4/13 (31%)
Neither agree nor disagree	2/13 (15%)
Agree	**5/13 (38%)**
Strongly agree	**2/13 (15%)**

The lowest percentages (see below) were two confidence related statements. Only one of the thirteen respondents (8%, 1/13) reported a perception that they could achieve more than others (*1.11), and* around one third (31%, 4/13) of participants perceived that most people on their course were smarter than they were *(1.5.)*

1.11. I am able to do better than other students on my course in most of my modules	
	Wave one
Strongly Disagree	0/13 (0%)
Disagree	0/13 (0%)
Neither agree nor disagree	12/13 (92%)
Agree	1/13 (8%)
Strongly agree	0/13 (0%)

1.5. Most of the people on my course are smarter than I am	
	Wave one Number of Participants (%)
Strongly Disagree	1/13 (8%)
Disagree	2/13 (15%)
Neither agree nor disagree	6/13 (46%)
Agree	**3/13 (23%)**
Strongly agree	**1/13 (8%)**

4.5.2. Comparison: Section 1 of wave one and wave two for *agree* and *strongly agree*

In wave two, in contrast to wave one, the results for the capability statements are slightly different. The results below show the changes. In wave two in comparison to wave one, the focus changed slightly with the majority 12/13 (92%) of participants perceiving that they were most capable in activities related to lectures and not giving up when faced with difficulties. In the second wave there is nothing *all* the participants strongly agreed or agreed with.

4.5.2.1. Increases from wave one to wave two.

The statements that had the biggest percentage increase from wave one to wave two was *1.11 I am able to do better than other students on my course in most of my modules, which* rose from 1/13 (8%) to 5/13 (48%) as seen below. This was followed by *1.8 I am*

confident to answer questions when asked by my lecturers in sessions, rising from 7/13 (52%) to 10/13 (77%) and *1.3. advising other people,* rising from 8/13 (62%) to 11/12 (92%), both increasing by three participants each.

1.11. I am able to do better than other students on my course in most of my modules		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	1/13 (8%)
Neither agree nor disagree	12/13 (92%)	6/13 (46%)
Agree	**1/13 (8%)**	**3/13 (23%)**
Strongly agree	**0/13 (0%)**	**2/13 (15%)**

1.8. I am confident to answer questions when asked by my lecturers in sessions		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	4/13 (31%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	3/13 (23%)
Agree	**5/13 (38%)**	**7/13 (54%)**
Strongly agree	**2/13 (15%)**	**3/13 (23%)**

1.3. I advise other people on my course how to complete the work required		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	2/13 (15%)	0/13 (0%)
Neither agree nor disagree	3/13 (23%)	2/13 (15%)
Agree	**7/13 (54%)**	**10/13 (77%)**
Strongly agree	**1/13 (8%)**	**1/13 (8%)**

The following statements also saw an increase but by two participants each. These were *1.1. I can follow lectures easily,* which went from 10/13 (77%) to 12/13 (92%), and *1.9. I know what is required of me to study at PGT level* increased from 9/13 (69%) to 11/13

(85%). The other statement that saw an increase rising by one participant was *1.10. I do not give up easily when faced with difficult questions,* changing from 11/13 (85%) to 12/13 (92%).

1.1. I can follow lectures easily		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	1/13 (8%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	1/13 (8%)
Agree	**6/13 (46%)**	**7/13 (54%)**
Strongly agree	**4/13 (31%)**	**5/13 (38%)**

1.9. I know what is required of me to study at PGT level		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	2/13 (15%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	2/13 (15%)
Agree	**5/13 (38%)**	**8/13 (62%)**
Strongly agree	**4/13 (31%)**	**3/13 (23%)**

1.10. I do not give up easily when faced with difficult questions		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	1/13 (8%)
Agree	**7/13 (54%)**	**8/13 (62%)**
Strongly agree	**4/13 (31%)**	**4/13 (31%)**

4.5.2.2. Decreases from wave one to wave two.

Some academic activities showed a decline in agreement by some of the participants. The academic activity that declined the most from wave one to wave two was *1.12 a willingness to put more effort into studies,* which 13/13 (100%) of participants *agreed* or

strongly agreed with in wave one, but in wave two this declined to 10/13 (77%). This suggests a decrease in enthusiasm in their studies by some.

1.12. I am willing to put in more effort to university study		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	1/13 (8%)
Neither agree nor disagree	0/13 (0%)	2/13 (15%)
Agree	**7/13 (54%)**	**3/13 (23%)**
Strongly agree	**6/13 (46%)**	**7/13 (54%)**

Other statements which saw a decline include *1.6. studying hard to pass the course,* which fell from 12/13 (92%) to 10/13 (77%) for *strongly agree* and *agree,* demonstrating a change in opinion by two participants. The final two statements which showed a fall, were *1.7. I participate/speak in lectures and seminars,* and *1.4. paying attention to lecturers during seminars and lectures,* which remained with the highest percentage overall, but one person had changed their mind.

1.6. I study hard to pass the course		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	1/13 (8%)
Neither agree nor disagree	1/13 (8%)	2/13 (15%)
Agree	**3/13 (23%)**	**3/13 (23%)**
Strongly agree	**9/13 (69%)**	**7/13 (54%)**

1.7. I participate/speak in lectures and seminars		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	1/13 (8%)	0/13 (0%)
Disagree	3/13 (23%)	2/13 (15%)
Neither agree nor disagree	0/13 (0%)	3/13 (23%)
Agree	**5/13 (38%)**	**5/13 (38%)**

Strongly agree	**4/13 (31%)**	**3/13 (23%)**

1.4. I pay attention to my lectures during seminars and lectures		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	0/13 (0%)	1/13 (8%)
Agree	**7/13 (54%)**	**6/13 (46%)**
Strongly agree	**6/13 (46%)**	**6/13 (46%)**

4.5.2.3. No change from wave one to wave two.

There were two academic activities where the results did not change overall from wave one to wave two. The first of these was *1.2. I concentrate well in lectures and seminars,* which remained at 10/13 (77%), although this had changed slightly with more of the participants *strongly agreeing* than in wave one. There was also no change in the number of participants who thought most people were smarter (*1.5.)* with 4/13 (31%), a third of respondents.

1.2. I concentrate well in lectures and seminars		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)
Disagree	2/13 (15%)	1/13 (8%)
Neither agree nor disagree	1/13 (8%)	2/13 (15%)
Agree	**6/13 (46%)**	**4/13 (31%)**
Strongly agree	**4/13 (31%)**	**6/13 (46%)**

1.5. Most of the people on my course are smarter than I am		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	1/13 (8%)	1/13 (8%)
Disagree	2/13 (15%)	3/13 (23%)
Neither agree nor disagree	6/13 (46%)	5/13 (38%)

Agree	**3/13 (23%)**	**3/13 (23%)**
Strongly agree	**1/13 (8%)**	**1/13 (8%)**

4.5.3. Section 1: Comparison of all waves of data.

The results below provide all the Section 1 data for the thirteen respondents who completed all three SDQs in all three waves. It gives the full picture of the highest to lowest percentages for each of the twelve listed academic activities as seen above in the previous section one results. They are related to the capability statements for *strongly agree* and *agree.*

In wave three, in comparison to wave two, 13/13 (100%) *agreed* or *strongly agreed* they did not give up when faced with difficult questions (1.10). This demonstrates a change of focus from participation in lectures which had the highest percentage in wave two.

1.10. I do not give up easily when faced with difficult questions			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	1/13 (8%)	0/13 (0%)
Agree	**7/13 (54%)**	**8/13 (62%)**	**8/13 (62%)**
Strongly agree	**4/13 (31%)**	**4/13 (31%)**	**5/13 (38%)**

4.5.3.1. Biggest increases from wave two to wave three.

The biggest change from wave two to wave three was *1.11. being able to do better than others,* which increased by four participants from 5/13 (38%) to 10/13 (77%). The next biggest change was an increase by two participants for *1.2. I concentrate well in lectures and seminars 10/13* (77%) to 12/13 (92%), and *1.12. I am willing to put in more effort to university study,* which also rose from 10/13 (77%) to 12/13 (92%).

1.11. I am able to do better than other students on my course in most of my modules			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	1/13 (8%)	1/13 (8%)
Neither agree nor disagree	12/13 (92%)	6/13 (46%)	2/13 (15%)
Agree	**1/13 (8%)**	**3/13 (23%)**	**6/13 (46%)**

Strongly agree	**0/13 (0%)**	**3/13 (23%)**	**4/13 (31%)**

1.2. I concentrate well in lectures and seminars			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	2/13 (15%)	1/13 (8%)	1/13 (8%)
Neither agree nor disagree	1/13 (8%)	2/13 (15%)	0/13 (0%)
Agree	**6/13 (46%)**	**4/13 (31%)**	**8/13 (62%)**
Strongly agree	**4/13 (31%)**	**6/13 (46%)**	**4/13 (31%)**

1.12. I am willing to put in more effort to university study			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	1/13 (8%)	0/13 (0%)
Neither agree nor disagree	0/13 (0%)	2/13 (15%)	1/13 (8%)
Agree	**7/13 (54%)**	**3/13 (23%)**	**5/13 (38%)**
Strongly agree	**6/13 (46%)**	**7/13 (54%)**	**7/13 (54%)**

The next set of increases all rose by one participant each in comparison to wave two, by the end of their courses. This was the case for *1.3. I advise other people on my course how to complete the work required,* moving from 11/13 (85%) to 12/13 (92%) *1.6. I study hard to pass the course* which went from 10/13 (77%) to 11/13 (85%)**,** and *1.7. I participate/speak in lectures and seminars* increased from 8/13 (62%) to 9/13 (69%). This group also includes *1.10.* which was seen above, which changed from 12/13 (92%) to 13/13 100% of participants in wave three.

1.3. I advise other people on my course how to complete the work required			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13% (0%)	0/13 (0%)
Disagree	2/13 (15%)	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	3/13 (23%)	2/13 (15%)	1/13 (8%)
Agree	**7/13 (54%)**	**10/13 (77%)**	**7/13 (54%)**
Strongly agree	**1/13 (8%)**	**1/13 (8%)**	**5/13 (38%)**

1.6. I study hard to pass the course			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13% (0%)	0/13 (0%)
Disagree	0/13 (0%)	1/13 (8%)	0/13 (0%)
Neither agree nor disagree	1/13 (8%)	2/13 (15%)	2/13 (15%)
Agree	**3/13 (23%)**	**3/13 (23%)**	**4/13 (31%)**
Strongly agree	**9/13 (69%)**	**7/13 (54%)**	**7/13 (54%)**

1.7. I participate/speak in lectures and seminars			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	1/13 (8%)	0/13 (0%)	1/13 (8%)
Disagree	3/13 (23%)	2/13 (15%)	2/13 (15%)
Neither agree nor disagree	0/13 (0%)	3/13 (23%)	1/13 (8%)
Agree	**5/13 (38%)**	**5/13 (38%)**	**5/13 (38%)**
Strongly agree	**4/13 (31%)**	**3/13 (23%)**	**4/13 (31%)**

4.5.3.2. Decreases from wave two to wave three.

The greatest decline was *1.5. most of the people are smarter*, which dropped from one-third of participants 4/13, (31%) to 2/13 (15%) in wave three. This shows an increase in confidence when participants were comparing themselves to others. This supports the rise in evidence of positive self-perception from wave two to wave three that other people were not smarter than the participants, although it does show that two people did not feel that they were smarter than others.

1.5. Most of the people on my course are smarter than I am			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	1/13 (8%)	1/13 (8%)	1/13 (8%)
Disagree	2/13 (15%)	3/13 (23%)	3/13 (23%)
Neither agree nor disagree	6/13 (46%)	5/13 (38%)	7/13 (54%)
Agree	**3/13 (23%)**	**3/13 (23%)**	**2/13 (15%)**
Strongly agree	**1/13 (8%)**	**1/13 (8%)**	**0/13 (0%)**

The other two statements which decreased were *1.8. I am confident to answer questions when asked by my lecturers in sessions,* which changed from 10/13 (77%) to 9/13 (69%) and *1.9. I know what is required of me to study at PGT level* 11/13 (85%) to 10/13 (77%)

1.8. I am confident to answer questions when asked by my lecturers in sessions			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	1/13 (8%)
Disagree	4/13 (31%)	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	3/13 (23%)	3/13 (23%)
Agree	**5/13 (38%)**	**7/13 (54%)**	**7/13 (54%)**
Strongly agree	**2/13 (15%)**	**3/13 (23%)**	**2/13 (15%)**

1.9. I know what is required of me to study at PGT level			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	2/13 (15%)	0/13 (0%)	1/13 (8%)
Neither agree nor disagree	2/13 (15%)	2/13 (15%)	2/13 (15%)
Agree	**5/13 (38%)**	**8/13 (62%)**	**8/13 (62%)**
Strongly agree	**4/13 (31%)**	**3/13 (23%)**	**2/13 (15%)**

4.5.3.3. No change in overall participants who agree or strongly agree from wave two to wave three.

There were two statements in wave three at the end of the course that did not change overall from wave two to wave three. These were *1.1. I can follow lectures easily* and *1.4. I pay attention to my lecturers during seminars and lectures,* which both remained at 12/13 (92%), with a slight change in the composition of *agree* and *strongly agree*, with both demonstrating slightly more *agrees* than *strongly agrees*, which shows a slight decline in confidence from wave two to wave three.

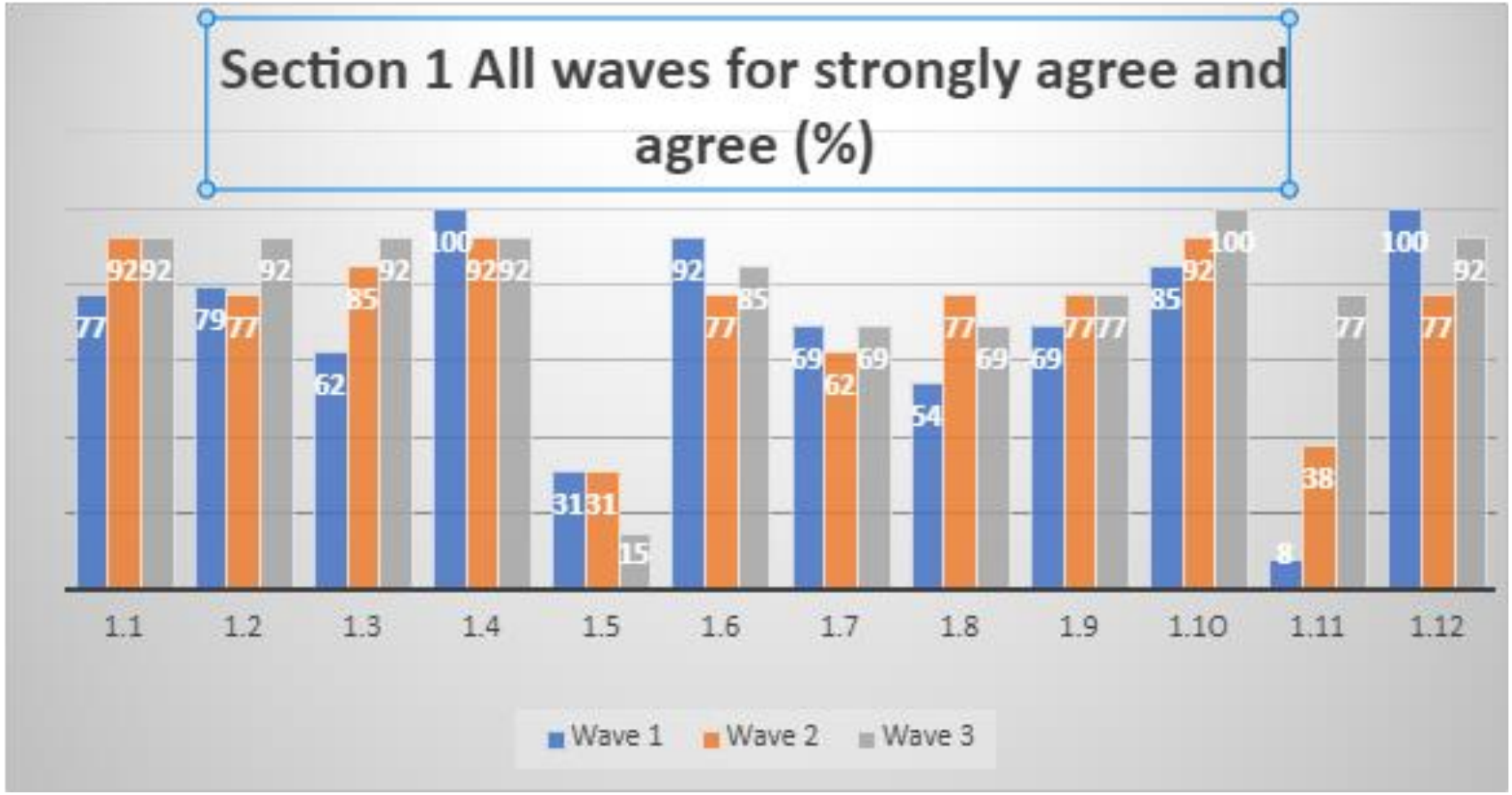
1.1. I can follow lectures easily			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	1/13 (8%)	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	2/13 (15%)	1/13 (8%)	1/13 (8%)
Agree	**6/13 (46%)**	**7/13 (54%)**	**8/13 (62%)**
Strongly agree	**4/13 (31%)**	**5/13 (38%)**	**4/13 (31%)**

1.4. I pay attention to my lecturers during seminars and lectures			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Disagree	0/13 (0%)	0/13 (0%)	0/13 (0%)
Neither agree nor disagree	0/13 (0%)	1/13 (8%)	1/13 (8%)
Agree	**7/13 (54%)**	**6/13 (46%)**	**8/13 (62%)**
Strongly agree	**6/13 (46%)**	**6/13 (46%)**	**4/13 (31%)**

4.5.4. Section 1, All three waves.

It is possible to see the data above as patterns of movement over the three waves in the data for the thirteen participants who answered all three SDQs. These can be seen in Figure 4.10.

Figure 4. 10: The changes in the Section 1 data for *strongly agree* and *agree.*



The activities that saw an overall increase from wave one to three were *1.1. following lectures easily, 1.3. advising other people on the work required, 1.9. knowing what is required to study at PGT level, 1.10. not giving up easily when faced with difficulties,* and *1.11. being able to do better than other people on my course.* There was evidence of decreases in perception of capability. These were *1.4. I pay attention to lecturers during seminars and lectures* and *1.5. most of the people on my course are smarter than I am.* Some patterns showed a drop in self-perception of ability midway through the programmes. This was seen in *1.2. concentrating in lectures, 1.6. studying hard to pass the course, 1.7. I participate/speak in lectures and seminars and 1.12. a willingness to put more effort in to university study.* Finally, there is one statement where there was a rise from wave one to wave two and then a decrease from wave two to three. This was *1.8. confidence to answer questions when asked by lecturers in sessions.*

4.5.5 Summary

In wave one, the top three percentage scores and focus were on lecture activities, effort and studying hard. In wave two there were changes in the data. The academic activities that rose the highest were *1.11*. relating to confidence in comparison to others and being confident to answer questions in lectures and taught sessions. The biggest decreases were a willingness to put more effort into studies and studying hard, which appeared at the top of the results in wave one. By wave three, more changes and movement could be observed. *1.11.* saw another big increase, doubling, showing a further increase in confidence in comparison to others, supported by the largest decrease, with 1.5., most people being smarter, which demonstrates an increase in confidence. However, there is a lack of consistency in the data. Some of the participants grew in positive self-perception over the duration of their courses in some of the activities, such as comparison to others. For other activities the self-perception of ability dropped slightly midway through the course, especially related to the effort required. A few people demonstrated a drop in self-perception of ability by the end of their courses in a few academic activities. The evidence shows that the results, despite the overall growth in perceived self-confidence, vary, depending on the academic activity under consideration.

4.5.6. Section 1, Disagreement

There was evidence of disagreement as well as agreement in the data. The responses to Section 1 allowed expressions of disagreement with the given statements, which may

demonstrate a self-perceived lack of capability. These will be presented in the next section.

4.5.6.1. Section 1 results for SDQ1 for disagree and strongly disagree.

The results below are the findings from Section 1, wave one. It shows the self-assessed capability statements for *strongly disagree and disagree* in descending order of number of participants and percentages. One-third of the participants did not perceive they had the capability to (1.7.) *participate/speak in lectures and seminars* along with *1.8. being confident to answer questions when asked by lecturers in sessions* with 4/13 (31%).

1.7. I participate/speak in lectures and seminars	
	Wave one Number of Participants (%)
Strongly Disagree	**1/13 (8%)**
Disagree	**3/13 (23%)**
Neither agree nor disagree	0/13 (0%)
Agree	5/13 (38%)
Strongly agree	4/13 (31%)

1.8. I am confident to answer questions when asked by my lecturers in sessions	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**4/13 (31%)**
Neither agree nor disagree	2/13 (15%)
Agree	5/13 (38%)
Strongly agree	2/13 (15%)

A quarter of participants 3/13 (23%) did not think that other people were smarter than they were (*1.5.)* (See below). Whereas two participants (15%) disagreed with each of the following statements, *1.2. I can concentrate well in lectures and seminars, 1.3. I advise other people on my course how to complete the work required,* and *1.9. I know what is required of me to study at PGT level.* Only one person disagreed that they could follow lectures easily *(1.1.*

1.5. Most of the people on my course are smarter than I am	
	Wave one Number of Participants (%)
Strongly Disagree	**1/13 (8%)**
Disagree	**2/13 (15%)**
Neither agree nor disagree	6/13 (46%)
Agree	3/13 (23%)
Strongly agree	1/13 (8%)

1.2. I concentrate well in lectures and seminars	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**2/13 (15%)**
Neither agree nor disagree	1/13 (8%)
Agree	6/13 (46%)
Strongly agree	4/13 (31%)

1.3. I advise other people on my course how to complete the work required	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**2/13 (15%)**
Neither agree nor disagree	3/13 (23%)
Agree	7/13 (54%)
Strongly agree	1/13 (8%)

1.9. I know what is required of me to study at PGT level	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**2/13 (15%)**
Neither agree nor disagree	2/13 (15%)
Agree	5/13 (38%)
Strongly agree	4/13 (31%)
1.1. I can follow lectures easily	

	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**1/13 (8%)**
Neither agree nor disagree	2/13 (15%)
Agree	6/13 (46%)
Strongly agree	4/13 (31%)

There were five statements (see below) that did not attract any disagreement. These were *1.4. paying attention to lecturers during seminars and lectures*, *1.6. studying hard to pass the course, 1.10. not giving up easily when faced with difficult questions, 1.11. being able to do better than other students in most of my modules,* and *1.12. a willingness to put in more effort to university study.*

1.4. I pay attention to my lecturers during seminars and lectures	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**0/13 (0%)**
Neither agree nor disagree	0/13 (0%)
Agree	7/13 (54%)
Strongly agree	6/13 (46%)

1.6. I study hard to pass the course	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**0/13 (0%)**
Neither agree nor disagree	1/13 (8%)
Agree	3/13 (23%)
Strongly agree	9/13 (69%)

1.10. I do not give up easily when faced with difficult questions	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)
Agree	7/13 (54%)
Strongly agree	4/13 (31%)

1.11. I am able to do better than other students on my course in most of my modules	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**0/13 (0%)**
Neither agree nor disagree	12/13 (92%)
Agree	1/13 (8%)
Strongly agree	0/13 (0%)

1.12. I am willing to put in more effort to university study	
	Wave one Number of Participants (%)
Strongly Disagree	**0/13 (0%)**
Disagree	**0/13 (0%)**
Neither agree nor disagree	0/13 (0%)
Agree	7/13 (54%)
Strongly agree	6/13 (46%)

4.5.6.2 Section 1, wave 2, results for strongly disagree and disagree.

In wave two in comparison to wave one, the results for the capability statements are slightly different. The results below show the changes. The only activity that one third of the participants disagreed with in wave two compared to wave one was *1.5. Most of the people on my course are smarter than I am,* which changed from 3/13 to 4/13.

1.5. Most of the people on my course are smarter than I am		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**1/13 (8%)**	**1/13 (8%)**
Disagree	**2/13 (15%)**	**3/13 (23%)**
Neither agree nor disagree	6/13 (46%)	5/13 (38%)
Agree	3/13 (23%)	3/13 (23%)
Strongly agree	1/13 (8%)	1/13 (8%)

The biggest change from wave one to wave two was a decrease for *1.8. I am confident to answer questions when asked by my lecturers in sessions,* which declined from one third of participants in wave one, to no-one disagreeing in wave two. These results show an increase in perception of capability to complete the academic activity.

1.8. I am confident to answer questions when asked by my lecturers in sessions		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**4/13 (31%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	3/13 (23%)
Agree	5/13 (38%)	7/13 (54%)
Strongly agree	2/13 (15%)	3/13 (23%)

Other activities which saw a decrease, were *1.7 participating in seminars and lectures* which went from one-third, 4/13 to 2/13 (15%), *1.3. advising other people how to complete the course* changed from 2/13 (15%) to 0/13 (0%), 1.9. *knowing what is required to study at PGT level* moved from 2/13 (15%) to 0/13 (0%), 1.2. *concentrating well in lectures and seminars* changed from 2/13 (15%) to 1/13 (8%), and *1.1. following lectures easily,* reduced from 1/13 (8%) to 0/13 (0%).

1.7. I participate/speak in lectures and seminars		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**1/13 (8%)**	**0/13 (0%)**
Disagree	**3/13 (23%)**	**2/13 (15%)**
Neither agree nor disagree	0/13 (0%)	3/13 (23%)
Agree	5/13 (38%)	5/13 (38%)
Strongly agree	4/13 (31%)	3/13 (23%)

1.3. I advise other people on my course how to complete the work required		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**2/13 (15%)**	**0/13 (0%)**
Neither agree nor disagree	3/13 (23%)	2/13 (15%)
Agree	7/13 (54%)	10/13 (77%)
Strongly agree	1/13 (8%)	1/13 (8%)

1.9. I know what is required of me to study at PGT level		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**2/13 (15%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	2/13 (15%)
Agree	5/13 (38%)	8/13 (62%)
Strongly agree	4/13 (31%)	3/13 (23%)

1.2. I concentrate well in lectures and seminars		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**2/13 (15%)**	**1/13 (8%)**
Neither agree nor disagree	1/13 (8%)	2/13 (15%)
Agree	6/13 (46%)	4/13 (31%)
Strongly agree	4/13 (31%)	6/13 (46%)

1.1. I can follow lectures easily		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**1/13 (8%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	1/13 (8%)
Agree	6/13 (46%)	7/13 (54%)
Strongly agree	4/13 (31%)	5/13 (38%)

The following statements all show a minor increase in results with one person disagreeing in each statement. In wave one they had shown no disagreement. These were *1.6. I study hard to pass the course, 1.11. I am able to do better than other students on my course in most of my modules,* and *1.12. I am willing to put in more effort to university study.*

1.6. I study hard to pass the course		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**1/13 (8%)**
Neither agree nor disagree	1/13 (8%)	2/13 (15%)
Agree	3/13 (23%)	3/13 (23%)
Strongly agree	9/13 (69%)	7/13 (54%)

1.11. I am able to do better than other students on my course in most of my modules		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**1/13 (8%)**
Neither agree nor disagree	12/13 (92%)	6/13 (46%)
Agree	1/13 (8%)	3/13 (23%)
Strongly agree	0/13 (0%)	2/13 (15%)

1.12. I am willing to put in more effort to university study		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**1/13 (8%)**
Neither agree nor disagree	0/13 (0%)	2/13 (15%)
Agree	7/13 (54%)	3/13 (23%)
Strongly agree	6/13 (46%)	7/13 (54%)

In wave two there were only two statements which had no disagreement, compared to a total of five in wave one. These are shown below and are *1.4. I pay attention to my lecturers during seminars and lectures,* and *1.10. I do not give up easily when faced with difficult questions.*

1.4. I pay attention to my lecturers during seminars and lectures		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	0/13 (0%)	1/13 (8%)
Agree	7/13 (54%)	6/13 (46%)
Strongly agree	6/13 (46%)	6/13 (46%)

1.10. I do not give up easily when faced with difficult questions		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	1/13 (8%)
Agree	7/13 (54%)	8/13 (62%)
Strongly agree	4/13 (31%)	4/13 (31%)

4.5.6.3. Section 1, comparison of all waves for disagree and strongly disagree.

The results for all three waves of section 1 for *disagree* and *strongly disagree* can be seen below. The changes were small in these results from wave two to wave three. Two academic activities increased signifying a decrease in perception of capability by one person each. This applied to *1.7. participating in lectures and seminars* which went from 2/13 (15%) to 3/13 (23%), *1.8. confidence to answer questions when asked by lecturers* rose from 0/13 (0%) to 1/13 (8%) and *1.9. knowing what is required to study at PGT level* changed from 0/13 (0%) to 1/13 (8%).

1.7. I participate/speak in lectures and seminars			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**1/13 (8%)**	**0/13 (0%)**	**1/13 (8%)**
Disagree	**3/13 (23%)**	**2/13 (15%)**	**2/13 (15%)**
Neither agree nor disagree	0/13 (0%)	3/13 (23%)	1/13 (8%)
Agree	5/13 (38%)	5/13 (38%)	5/13 (38%)
Strongly agree	4/13 (31%)	3/13 (23%)	4/13 (31%)

1.8. I am confident to answer questions when asked by my lecturers in sessions			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**1/13 (8%)**
Disagree	**4/13 (31%)**	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	3/13 (23%)	3/13 (23%)
Agree	5/13 (38%)	7/13 (54%)	7/13 (54%)
Strongly agree	2/13 (15%)	3/13 (23%)	2/13 (15%)

1.9. I know what is required of me to study at PGT level			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Disagree	**2/13 (15%)**	**0/13 (0%)**	**1/13 (8%)**
Neither agree nor disagree	2/13 (15%)	2/13 (15%)	2/13 (15%)
Agree	5/13 (38%)	8/13 (62%)	8/13 (62%)
Strongly agree	4/13 (31%)	3/13 (23%)	2/13 (15%)

All the remaining statements stayed the same as wave two or with no disagreement. The highest disagreement was the same as in wave two, *1.5. most of the people on my course are smarter.* This again shows that more of the participants perceived improved self-belief in their capabilities in comparison to others.

1.5. Most of the people on my course are smarter than I am			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**1/13 (8%)**	**1/13 (8%)**	**1/13 (8%)**
Disagree	**2/13 (15%)**	**3/13 (23%)**	**3/13 (23%)**
Neither agree nor disagree	6/13 (46%)	5/13 (38%)	7/13 (54%)
Agree	3/13 (23%)	3/13 (23%)	2/13 (15%)
Strongly agree	1/13 (8%)	1/13 (8%)	0/13 (0%)

1.2. I concentrate well in lectures and seminars			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Disagree	**2/13 (15%)**	**1/13 (8%)**	**1/13 (8%)**
Neither agree nor disagree	1/13 (8%)	2/13 (15%)	0/13 (0%)
Agree	6/13 (46%)	4/13 (31%)	8/13 (62%)
Strongly agree	4/13 (31%)	6/13 (46%)	4/13 (31%)

1.11. I am able to do better than other students on my course in most of my modules			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**1/13 (8%)**	**1/13 (8%)**
Neither agree nor disagree	12/13 (92%)	6/13 (46%)	2/13 (15%)
Agree	1/13 (8%)	3/13 (23%)	6/13 (46%)
Strongly agree	0/13 (0%)	3/13 (23%)	4/13 (31%)

1.1. I can follow lectures easily			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Disagree	**1/13 (8%)**	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	1/13 (8%)	1/13 (8%)
Agree	6/13 (46%)	7/13 (54%)	8/13 (62%)
Strongly agree	4/13 (31%)	5/13 (38%)	4/13 (31%)

1.3. I advise other people on my course how to complete the work required			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13% (0%)**	**0/13 (0%)**
Disagree	**2/13 (15%)**	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	3/13 (23%)	2/13 (15%)	1/13 (8%)
Agree	7/13 (54%)	10/13 (77%)	7/13 (54%)

Strongly agree	1/13 (8%)	1/13 (8%)	5/13 (38%)

1.4. I pay attention to my lecturers during seminars and lectures			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	0/13 (0%)	1/13 (8%)	1/13 (8%)
Agree	7/13 (54%)	6/13 (46%)	8/13 (62%)
Strongly agree	6/13 (46%)	6/13 (46%)	4/13 (31%)

1.6. I study hard to pass the course			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13% (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**1/13 (8%)**	**0/13 (0%)**
Neither agree nor disagree	1/13 (8%)	2/13 (15%)	2/13 (15%)
Agree	3/13 (23%)	3/13 (23%)	4/13 (31%)
Strongly agree	9/13 (69%)	7/13 (54%)	7/13 (54%)

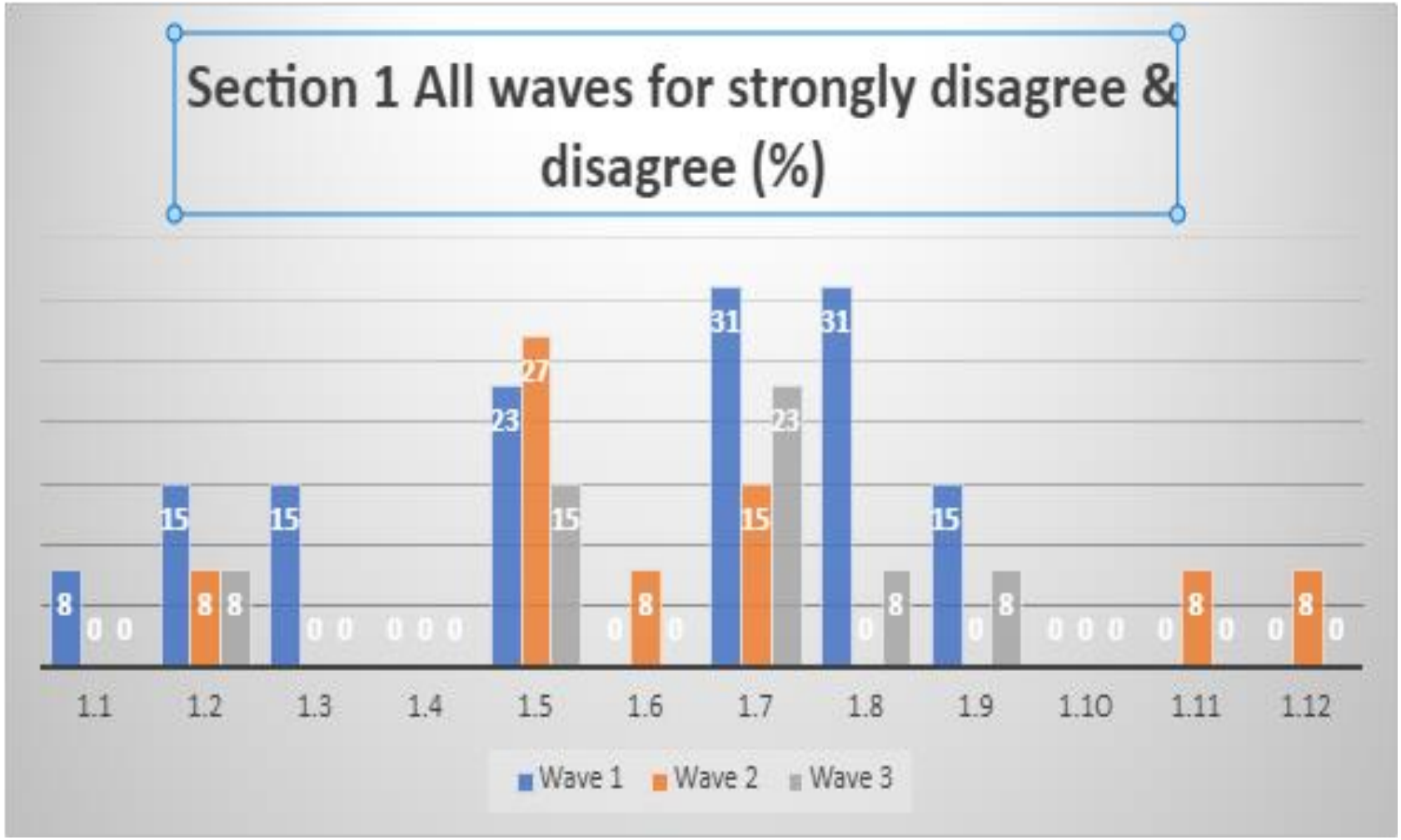
1.10. I do not give up easily when faced with difficult questions			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**
Neither agree nor disagree	2/13 (15%)	1/13 (8%)	0/13 (0%)
Agree	7/13 (54%)	8/13 (62%)	8/13 (62%)
Strongly agree	4/13 (31%)	4/13 (31%)	5/13 (38%)

1.12. I am willing to put in more effort to university study			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Strongly Disagree	**0/13 (0%)**	**0/13 (0%)**	**0/13 (0%)**

Disagree	**0/13 (0%)**	**1/13 (8%)**	**0/13 (0%)**
Neither agree nor disagree	0/13 (0%)	2/13 (15%)	1/13 (8%)
Agree	7/13 (54%)	3/13 (23%)	5/13 (38%)
Strongly agree	6/13 (46%)	7/13 (54%)	7/13 (54%)

Figure 4.11. below shows the overview of the data above. It clearly demonstrates the patterns of movement in choices of *disagree and strongly disagree*.

Figure 4. 11.: An overview of the changes in the Section 1 data for *strongly disagree* and *disagree.*



The results provide four different patterns of data and two statements remaining at 0% in all three waves. Overall, there is a decline in the results over the three waves. However, increases can be observed midway through the participants courses. This applies to *1.5. most of the people on the course being smarter, 1.6. studying hard to pass the course, 1.11. being able to do better than others on my course in most modules,* and *1.12. willingness to put more effort to university study*. These denote a perception of loss of capability for 1.6. and 1.12, but an increase in perception of capability for 1.5. and 1.11.

Other activities saw a decrease in results during the same period. This was found with *1.7. participating/speaking in lectures and seminars, 1.8. being confident to answer questions when asked by lecturers in sessions,* and *1.9. knowing what is required to study at PGT level.* This was followed by a small rise in wave three, thus indicating an increase in perception of capability to complete the activities, followed by a decrease by the end of the course.

4.5.7. Summary

The results relating to disagreement with the different academic activities present evidence of changes in perception of ability over the duration of the participants courses. There was an overall decline in levels of disagreement across the three waves, but it did not disappear completely in all activities. Some participants showed a perception of loss of capability mid-course, relating to effort made with their studies, and comparison to others, which denotes an improved sense of self-perception of their ability to complete the activities. Some activities, 1.7., 1.8. and 1.9. also show a rise in perception of lack of capability from mid-point to the end of the courses. Opinions of self-perceived ability changed over the three waves of data collection, but as found in the *strongly agree* and *agree* results, different statements produced varied patterns, the same people seemed to be more confident in some academic activities than they were in others, and for other academic activities some participants' confidence reduced over time. Therefore, there is evidence that perceived self-confidence grew in most activities, but again it is not applicable to all activities and for all participants.

4.6. Self-assessment of perception of level of abilities

The final section of each self-descriptive questionnaire asked the participants to reflect on the listed academic activities they thought they were "good at". It used a seven-point Likert scale ranging from *very good* to *no idea what it means*. This was an attempt to

encourage self-assessment of their ability and demonstrates their levels of confidence in these activities. Table 4.6. below provides the list of statements.

Table 4. 6.: List of Section 5 statements

Section 5	Academic activities "I am good at..."
5.1.	I am good at organising myself for study
5.2.	I am good at using my study time well
5.3.	I am good at thinking creatively
5.4.	I am good at solving problems
5.5.	I am good at reading for academic purposes
5.6.	I am good at actively listening to others
5.7.	I am good at searching for information
5.8.	I am good at making and using notes
5.9.	I am good at making good use of lectures and taught sessions
5.10.	I am good at participating in groupwork and seminars
5.11.	I am good at making presentations
5.12.	I am good at managing writing tasks
5.13.	I am good at writing essays using academic conventions
5.14.	I am good at writing reports
5.15.	I am good at writing a dissertation
5.16.	I am good at writing reflective assignments
5.17.	I am good at completing a research report
5.18.	I am good at avoiding cheating and plagiarism
5.19.	I am good at citing sources and writing references
5.20.	I am good at using numbers in assignment
5.21.	I am good at using technical language
5.22.	I am good at using computer skills for academic work
5.23.	I am good at thinking critically and analytically
5.24.	I am good at evaluating my own and others' arguments
5.25	I am good at developing memory skills
5.26	I am good at taking exams
5.27	I am good at evaluating my work

4.6.1. Section 5/3 Wave one results for *good* or *very good*.

In the wave one data (see results below) *5.18. avoiding cheating/plagiarism with* 11/13 (85%) was the academic activity most participants thought they were *good* or *very good* at.

5.18.	**Avoiding cheating/plagiarism**
	Wave one Number of Participants (%)
Very good	**7/13 (54%)**
Good	**4/13 (31%)**
Okay	1/13 (8%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

There were several statements which 10/13 (77%) of participants perceived they were *good* or *very good* at. These included *5.7. searching for information for assignments*, along with, *5.9. making good use of lectures/taught sessions, 5.19. citing and writing references*, *5.23. thinking critically and analytically, and 5.25. developing memory skills.*

5.7.	**Searching for information for assignments**
	Wave one Number of Participants (%)
Very good	**5/13 (38%)**
Good	**5/13 (38%)**
Okay	2/13 (62%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.9.	**Making good use of lectures/taught sessions**
	Wave one Number of Participants (%)
Very good	**4/13 (31%)**
Good	**6/13 (46%)**
Okay	1/13 (8%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	1/13 (8%)

5.19.	**Citing sources and writing references**
	Wave one Number of Participants (%)
Very good	**6/13 (46%)**
Good	**4/13 (31%)**
Okay	2/13 (15%)
Not sure how to do it	0/13 (0%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.23.	**Thinking critically and analytically**
	Wave one Number of Participants (%)
Very good	**5/13 (38%)**
Good	**5/13 (38%)**
Okay	2/13 (15%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.25.	**Developing memory skills**
	Wave one Number of Participants (%)
Very good	**2/13 (15%)**
Good	**8/13 (62%)**
Okay	1/13 (8%)
Not sure how to do it	1/13 (8%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

The next group of statements had 9/13 (69%) of participants who thought that they were *good* or *very good* at the following activities, *5.1. organising myself for study, 5.5. reading for academic purposes, 5.10. participating in group work and seminars, 5.11 making presentations, 5.15 writing a dissertation and 5.22. using computer skills for academic work*.

5.1.	**Organising myself for study**
	Wave one Number of Participants (%)
Very good	**6/13 (46%)**
Good	**3/13 (23%)**
Okay	3/13 (23%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.5.	**Reading for academic purposes**
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**
Good	**6/13 (46%)**
Okay	3/13 (23%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.10.	**Participating in groupwork and seminars**
	Wave one Number of Participants (%)
Very good	**5/13 (38%)**
Good	**4/13 (31%)**
Okay	3/13 (23%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.11.	**Making presentations**
	Wave one Number of Participants (%)
Very good	**1/13 (8%)**
Good	**8/13 (62%)**
Okay	4/13 (31%)
Not sure how to do it	0/13 (0%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.15.	**Writing a dissertation**
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**
Good	**6/13 (46%)**
Okay	2/13 (15%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.22.	**Using computer skills for academic work**
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**
Good	**6/13 (46%)**
Okay	2/13 (15%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

The next set of activity statements had 8/13 (62%) of participants. These included *5.2 using my study time well, 5.6. actively listening to others, 5.12. managing writing tasks, 5.13. writing essays using academic conventions, 5.14. writing reports, 5.21. using technical language, 5.26. taking exams and 5.27. evaluating my work.*

5.2.	**Using my study time well**
	Wave one Number of Participants (%)
Very good	**4/13 (31%)**
Good	**4/13 (31%)**
Okay	2/13 (15%)
Not sure how to do it	3/13 (23%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.6.	**Actively listening to others**
	Wave one Number of Participants (%)
Very good	**4/13 (31%)**
Good	**4/13 (31%)**
Okay	4/13 (31%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.12.	**Managing writing tasks**
	Wave one Number of Participants (%)
Very good	**4/13 (31%)**
Good	**4/13 (31%)**
Okay	3/13 (23%)
Not sure how to do it	3/13 (23%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.13.	**Writing essays using academic conventions**
	Wave one Number of Participants (%)
Very good	**5/13 (38%)**
Good	**3/13 (23%)**
Okay	2/13 (15%)
Not sure how to do it	3/13 (23%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.14.	**Writing reports**
	Wave one Number of Participants (%)
Very good	**4/13 (31%)**
Good	**4/13 (31%)**
Okay	8/13 (62%)
Not sure how to do it	3/13 (23%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.21.	Using technical language
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**
Good	**5/13 (38%)**
Okay	3/13 (23%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	1/13 (8%)

5.26.	Taking exams
	Wave one Number of Participants (%)
Very good	**4/13 (31%)**
Good	**4/13 (31%)**
Okay	5/13 (38%)
Not sure how to do it	0/13 (0%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.27.	Evaluating my work
	Wave one Number of Participants (%)
Very good	**5/13 (38%)**
Good	**3/13 (23%)**
Okay	2/13 (15%)
Not sure how to do it	3/13 (23%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

Over fifty percent of participants thought they were *good* or *very good* at the following activities. *5.4. solving problems, 5.8. making and using notes, 5.17. completing a research project, 5.20. using numbers in assignments,* and *5.24. evaluating my own and others' arguments*.

5.4.	Solving problems
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**
Good	**4/13 (31%)**
Okay	5/13 (38%)

Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.8.	**Making and using notes**
	Wave one Number of Participants (%)
Very good	**5/13 (38%)**
Good	**2/13 (15%)**
Okay	4/13 (31%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.17.	**Completing a research project**
	Wave one Number of Participants (%)
Very good	**2/13 (15%)**
Good	**5/13 (38%)**
Okay	4/13 (31%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.20.	**Using numbers in assignments**
	Wave one Number of Participants (%)
Very good	**2/13 (15%)**
Good	**5/13 (38%)**
Okay	5/13 (38%)
Not sure how to do it	0/13 (0%)
No idea what to do	0/13 (0%)
No idea what it means	1/13 (8%)

5.24.	**Evaluating my own and others' arguments**
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**

Good	**4/13 (31%)**
Okay	3/13 (23%)
Not sure how to do it	2/13 (15%)
No idea what to do	2/13 (15%)
No idea what it means	0/13 (0%)

5.3.	**Thinking creatively**
	Wave one Number of Participants (%)
Very good	**3/13 (23%)**
Good	**3/13 (23%)**
Okay	5/13 (38%)
Not sure how to do it	1/13 (8%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.16.	**Writing reflective assignments**
	Wave one Number of Participants (%)
Very good	**2/13 (15%)**
Good	**3/13 (23%)**
Okay	4/13 (31%)
Not sure how to do it	2/13 (15%)
No idea what to do	1/13 (8%)
No idea what it means	1/13 (8%)

The final two statements had the lowest percentage scores. *5.3. thinking creatively* with 6/13 (46%) followed by *5.16. writing reflective assignments* with 5/13 (38%). Perceived lack of reflective writing capability was mirrored in the UG results.

4.6.2. Section 5/3 wave two results for *good* or *very good*

The academic activities which had the biggest increases in *good* and *very good* from wave one to wave two were *3.6. listening to others,* which increased to 12/13 (92%) from 8/13 (62%) and *3.3. thinking creatively,* which in wave two had 10/13 (77%) from 6/13 (46%)

3.6.	Actively listening to others	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**4/13 (31%)**	**3/13 (23%)**
Good	**4/13 (31%)**	**9/13 (69%)**
Ok	4/13 (31%)	0/13 (0%)
Not sure how to do it	1/13 (8%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.3.	Thinking creatively	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**0/13 (0%)**
Good	**3/13 (23%)**	**10/13 (77%)**
Okay	5/13 (38%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	1/13 (8%)	1/13 (8%)
No idea what it means	0/13 (0%)	0/13 (0%)

The other activities that saw an increase, rising by two participants each wave was *3.19. citing sources and writing references* at 12/13 (92%) from 10/13 (77%), *3.16. writing a reflective essay* with 7/13 (54%) from 5/13 (38%), *3.12. managing writing tasks* was 10/13 (77%) from 8/13 (62%), *3.4. solving problems* rose to 10/13 (77%) from 8/13 (62%), 3.17. completing a research report increased to 9/13 (69%) from 7/13 (54%), *3.21. using technical language* went from 8/13 (62%) to 10/13 (77%) 3.24 e*valuating my own and others' arguments* inclined slightly from 7/13 (54%) to 9/13 (69%) and *3.27. evaluating my own work* which changed from 8/13 (62%) to 10/13 (77%) (see results below).

3.19.	Citing sources and writing references	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**6/13 (46%)**	**7/13 (54%)**
Good	**4/13 (31%)**	**5/13 (38%)**
Okay	2/13 (15%)	1/13 (8%)
Not sure how to do it	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.16.	**Writing reflective assignments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**2/13 (62%)**	**0/13 (0%)**
Good	**3/13 (23%)**	**7/13 (54%)**
Okay	4/13 (31%)	5/13 (38%)
Not sure how to do it	2/13 (62%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	1/13 (8%)	0/13 (0%)

3.12.	**Managing writing tasks**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**4/13 (31%)**	**3/13 (23%)**
Good	**4/13 (31%)**	**7/13 (54%)**
Okay	3/13 (23%)	3/13 (23%)
Not sure how to do it	3/13 (23%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.4.	**Solving problems**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**
Good	**4/13 (31%)**	**7/13 (54%)**
Okay	5/13 (38%)	4/13 (31%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.17.	**Completing a research project**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**2/13 (15%)**	**1/13 (8%)**
Good	**5/13 (38%)**	**8/13 (62%)**
Okay	4/13 (31%)	2/13 (15%)
Not sure how to do it	2/13 (15%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.21.	**Using technical language**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**
Good	**5/13 (38%)**	**8/13 (62%)**
Okay	3/13 (23%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	1/13 (8%)

3.24.	**Evaluating my own and others' arguments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**
Good	**4/13 (31%)**	**7/13 (54%)**
Okay	3/13 (23%)	3/13 (23%)
Not sure how to do it	2/13 (15%)	1/13 (8%)
No idea what to do	2/13 (15%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.27.	**Evaluating my work**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**5/13 (38%)**	**2/13 (15%)**
Good	**3/13 (23%)**	**8/13 (62%)**
Okay	2/13 (15%)	1/13 (8%)
Not sure how to do it	3/13 (23%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

Two statements increased by one person from wave one to wave two. *3.5. reading for academic purposes changed* from 9/13 (69%) to 10/13 (77%)*, 3.13. writing essays and using academic skills,* which went from 8/13 (62%) to 9/13 (69%) and *3.18. avoiding cheating and plagiarism* which increased to 12/13 (92%) from 11/13 (85%).

3.5.	**Reading for academic purposes**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**
Good	**6/13 (46%)**	**8/13 (62%)**

Okay	3/13 (23%)	3/13 (23%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.18.	**Avoiding cheating/plagiarism**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**7/13 (54%)**	**8/13 (62%)**
Good	**4/13 (31%)**	**4/13 (31%)**
Okay	1/13 (8%)	0/13 (0%)
Not sure how to do it	0/13 (0%)	0/13 (0%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)

3.13.	**Writing essays using academic conventions**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**5/13 (38%)**	**4/13 (31%)**
Good	**3/13 (23%)**	**5/13 (38%)**
Okay	8/13 (62%)	3/13 (23%)
Not sure how to do it	3/13 (23%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

4.6.3. Decreases from wave two to wave three.

There were also decreases from wave one to wave two, demonstrating a potential loss of confidence. The biggest change was for *3.9. making good use of lectures and taught sessions,* which fell from 10/13 (77%) and *3.15. writing a dissertation* which declined to 6/13 (46%) from 9/13 (69%) in wave one (see below).

3.9.	**Making good use of lectures/taught sessions**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**4/13 (31%)**	**1/13 (8%)**
Good	**6/13 (46%)**	**6/13 (46%)**
Okay	1/13 (8%)	4/13 (31%)
Not sure how to do it	1/13 (8%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	0/13 (0%)

3.15.	Writing a dissertation	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**
Good	**6/13 (46%)**	**4/13 (31%)**
Okay	2/13 (62%)	6/13 (46%)
Not sure how to do it	2/13 (62%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

The following statements decreased by two people each from wave one to wave two. These were *3.1. organising myself for study* which changed from 9/13 (69%) to 7/13 (54%) *3.2. using my study time well* declined to 6/13 (42%) from 8/13 (62%).

3.1.	Organising myself for study	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**6/13 (46%)**	**3/13 (23%)**
Good	**3/13 (23%)**	**4/13 (31%)**
Okay	3/13 (23%)	5/13 (38%)
Not sure how to do it	0/13 (0%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.2.	Using my study time well	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**4/13 (31%)**	**0/13 (0%)**
Good	**4/13 (31%)**	**6/13 (46%)**
Okay	2/13 (15%)	6/13 (46%)
Not sure how to do it	3/13 (23%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

The remaining decreases fell by one person each (see below). These included *3.10. participating in groupwork and seminars,* which dropped to 8/13 (62%) from 9/13 (69%), *3.14. writing reports* fell to 7/13 (54%) from 8/13 (62%), 3.20. *using numbers in assignments* changed to 8/13 (62%) from 9/13 (69%), *3.23. thinking critically and*

analytically moved to 9/13 (69%) from 10/13 (77%), and finally, *3.25. developing memory skills* decreased slightly to 9/13 (69%) from 10/13 (77%). These all demonstrate changes in self-perception from wave one to wave two.

3.10.	**Participating in groupwork and seminars**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**5/13 (38%)**	**3/13 (23%)**
Good	**4/13 (31%)**	**5/13 (38%)**
Okay	3/13 (23%)	5/13 (38%)
Not sure how to do it	0/13 (0%)	0/13 (0%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.14.	**Writing reports**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**4/13 (31%)**	**2/13 (62%)**
Good	**4/13 (31%)**	**5/13 (38%)**
Okay	2/13 (62%)	5/13 (38%)
Not sure how to do it	3/13 (23%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.20.	**Using numbers in assignments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**2/13 (15%)**	**2/13 (15%)**
Good	**5/13 (38%)**	**6/13 (46%)**
Okay	5/13 (38%)	3/13 (23%)
Not sure how to do it	0/13 (0%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	1/13 (8%)

3.23.	**Thinking critically and analytically**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**5/13 (38%)**	**2/13 (15%)**
Good	**5/13 (38%)**	**7/13 (54%)**

Okay	2/13 (15%)	4/13 (31%)
Not sure how to do it	0/13 (0%)	0/13 (0%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.25.	**Developing memory skills**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**2/13 (15%)**	**3/13 (23%)**
Good	**8/13 (62%)**	**6/13 (46%)**
Okay	1/13 (8%)	3/13 (23%)
Not sure how to do it	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

4.6.4. No change from wave one to wave two for *good* and *very good*.

There were several statements that demonstrated static results with no overall change from wave one to wave two (see below). This was the case for *3.7. searching for information for assignments* which was consistent with 10/13 (77%), 3.8. m*aking and using notes* with 7/13 (76%), *3.11. making presentations* 9/13 (69%), 3.22. *using computer skills for academic work,* which maintained 9/13 (69%) and finally 3.26. *taking exams* 8/13 (62%). However, there was a slight movement within the results, such as *3.8*. (see below) with a reduction in *very goods* and an increase in the number of *goods.*

3.7.	**Searching for information for assignments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**5/13 (38%)**	**5/13 (38%)**
Good	**5/13 (38%)**	**5/13 (38%)**
Okay	2/13 (15%)	3/13 (23%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.8.	**Making and using notes**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**5/13 (38%)**	**2/13 (15%)**
Good	**2/13 (15%)**	**5/13 (38%)**
Okay	4/13 (31%)	5/13 (38%)

Not sure how to do it	2/13 (15%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.11.	**Making presentations**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**1/13 (8%)**	**2/13 (15%)**
Good	**8/13 (62%)**	**7/13 (54%)**
Okay	4/13 (31%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.22.	**Using computer skills for academic work**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**3/13 (23%)**	**4/13 (31%)**
Good	**6/13 (46%)**	**5/13 (38%)**
Okay	2/13 (15%)	4/13 (31%)
Not sure how to do it	2/13 (15%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.26.	**Taking exams**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	**4/13 (31%)**	**2/13 (15%)**
Good	**4/13 (31%)**	**6/13 (46%)**
Okay	5/13 (38%)	3/13 (23%)
Not sure how to do it	0/13 (0%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)

4.6.5. Section 5/3 all wave results for *good* or *very good*

The results which compare all three questionnaires for section 5/3 can be seen in detail below. The biggest increase in data from wave two to wave three was *3.15. writing a dissertation,* which rose to 11/13 (85%) from 6/13 (46%) almost doubling. The second highest increase by four participants was *3.14. writing reports,* changing to 11/13 (85%) from 7/13 (54%).

3.15.	Writing a dissertation		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**6/13 (46%)**	**4/13 (31%)**	**7/13 (54%)**
Okay	2/13 (62%)	6/13 (46%)	1/13 (8%)
Not sure how to do it	2/13 (62%)	1/13 (8%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.14.	Writing reports		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**4/13 (31%)**	**2/13 (15%)**	**6/13 (46%)**
Good	**4/13 (31%)**	**5/13 (38%)**	**5/13 (38%)**
Okay	8/13 (62%)	5/13 (38%)	8/13 (62%)
Not sure how to do it	3/13 (23%)	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

Academic activities that increased from wave two to wave three by three participants each were *3.1. organising myself for study,* changed to 10/13 (77%) from 7/13 (54%), *3.8 making and using notes* also rose to 10/13 (77%) from 7/13 (54%). The same result was seen for *3.16. writing reflective assignments* as shown below

3.1.	Organising myself for study		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**6/13 (46%)**	**3/13 (23%)**	**4/13 (31%)**
Good	**3/13 (23%)**	**4/13 (31%)**	**6/13 (46%)**
Okay	3/13 (23%)	5/13 (38%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.8.	Making and using notes		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**5/13 (38%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**2/13 (15%)**	**5/13 (38%)**	**6/13 (46%)**
Okay	4/13 (31%)	5/13 (38%)	2/13 (15%)
Not sure how to do it	2/13 (15%)	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	1/13 (8%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.16.	Writing reflective assignments		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**2/13 (62%)**	**0/13 (0%)**	**3/13 (23%)**
Good	**3/13 (23%)**	**7/13 (54%)**	**7/13 (54%)**
Okay	4/13 (31%)	5/13 (38%)	2/13 (15%)
Not sure how to do it	2/13 (62%)	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	0/13 (0%)	0/13 (0%)

The statements that increased by two participants each are as follows, *3.23 thinking critically and analytically* rose to 12/13 (92%) from 10/13 (77%). This was the same for *3.5. reading for academic purposes. 3.4. solving problems increased* to 11/13 (85%) from 9/13 (69%). The next increase to 10/13 (77%) from 8/13 (62%) was 3.20. *using numbers in assignments*. Finally in this section, *3.2. using my study time well* increased from 6/13 (46%) to 8/13.

3.23.	Thinking critically and analytically		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**5/13 (38%)**	**2/13 (15%)**	**3/13 (23%)**
Good	**5/13 (38%)**	**7/13 (54%)**	**9/13 (69%)**
Okay	2/13 (15%)	4/13 (31%)	0/13 (0%)
Not sure how to do it	0/13 (0%)	0/13 (0%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.5.	Reading for academic purposes		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**6/13 (46%)**	**8/13 (62%)**	**8/13 (62%)**
Okay	3/13 (23%)	3/13 (23%)	1/13 (8%)
Not sure how to do it	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.4.	Solving problems		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**4/13 (31%)**	**7/13 (54%)**	**7/13 (54%)**
Okay	5/13 (38%)	4/13 (31%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.20.	Using numbers in assignments		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**2/13 (15%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**5/13 (38%)**	**6/13 (46%)**	**6/13 (46%)**
Okay	5/13 (38%)	3/13 (23%)	3/13 (23%)
Not sure how to do it	0/13 (0%)	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	1/13 (8%)	0/13 (0%)

3.2.	Using my study time well		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**4/13 (31%)**	**0/13 (0%)**	**3/13 (23%)**
Good	**4/13 (31%)**	**6/13 (46%)**	**5/13 (38%)**
Okay	2/13 (15%)	6/13 (46%)	5/13 (38%)
Not sure how to do it	3/13 (23%)	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

Most of the statements in wave three increased by one participant each. These included *3.18, avoiding cheating and plagiarism,* and *3.19. citing sources and writing references,* which both increased to 13/13 (100%) from 12/13 (92%). *3.3 thinking creatively, 3.17 completing a research project*, and *3.27. evaluating my work,* all increased to 11/13 (85%) from 10/13 (77%). 3.11. *making presentations*, 3.17. *completing a research report*, *3.22. using computer skills for academic work*, *3.24. evaluating my own and others' arguments*, and *3.25. developing memory skills* all rose to 10/13 (77%) from 9/13 (69%). *3.10. participating in groupwork and seminars,* and *3.26. taking exams* both increased to 9/13 (69%) from 8/13 (62%). Finally, *3.9. making good use of lectures/taught sessions* decreased to 8/13 (62%) from 7/13 (54%) (see below).

3.18.	**Avoiding cheating/plagiarism**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**7/13 (54%)**	**8/13 (62%)**	**7/13 (54%)**
Good	**4/13 (31%)**	**4/13 (31%)**	**6/13 (46%)**
Okay	1/13 (8%)	0/13 (0%)	0/13 (0%)
Not sure how to do it	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)	0/13 (0%)

3.19.	**Citing sources and writing references**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**6/13 (46%)**	**7/13 (54%)**	**9/13 (69%)**
Good	**4/13 (31%)**	**5/13 (38%)**	**4/13 (31%)**
Okay	2/13 (15%)	1/13 (8%)	0/13 (0%)
Not sure how to do it	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.3.	**Thinking creatively**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**0/13 (0%)**	**2/13 (15%)**
Good	**3/13 (23%)**	**10/13 (77%)**	**9/13 (69%)**
Okay	5/13 (38%)	2/13 (15%)	1/13 (8%)

Not sure how to do it	1/13 (8%)	0/13 (0%)	1/13 (8%)
No idea what to do	1/13 (8%)	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.7.	**Searching for information for assignments**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**5/13 (38%)**	**5/13 (38%)**	**7/13 (54%)**
Good	**5/13 (38%)**	**5/13 (38%)**	**4/13 (31%)**
Okay	8/13 (62%)	3/13 (23%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.27.	**Evaluating my work**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**5/13 (38%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**3/13 (23%)**	**8/13 (62%)**	**7/13 (54%)**
Okay	2/13 (15%)	1/13 (8%)	1/13 (8%)
Not sure how to do it	3/13 (23%)	2/13 (15%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.11.	**Making presentations**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**1/13 (8%)**	**2/13 (15%)**	**5/13 (38%)**
Good	**8/13 (62%)**	**7/13 (54%)**	**5/13 (38%)**
Okay	4/13 (31%)	2/13 (15%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	2/13 (15%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.17.	Completing a research project		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**2/13 (15%)**	**1/13 (8%)**	**1/13 (8%)**
Good	**5/13 (38%)**	**8/13 (62%)**	**9/13 (69%)**
Okay	4/13 (31%)	2/13 (15%)	3/13 (23%)
Not sure how to do it	2/13 (15%)	2/13 (15%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.22.	Using computer skills for academic work		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**4/13 (31%)**	**8/13 (62%)**
Good	**6/13 (46%)**	**5/13 (38%)**	**2/13 (15%)**
Okay	2/13 (15%)	4/13 (31%)	3/13 (23%)
Not sure how to do it	2/13 (15%)	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.24.	Evaluating my own and others' arguments		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**	**4/13 (31%)**
Good	**4/13 (31%)**	**7/13 (54%)**	**6/13 (46%)**
Okay	3/13 (23%)	3/13 (23%)	2/13 (15%)
Not sure how to do it	2/13 (15%)	1/13 (8%)	1/13 (8%)
No idea what to do	2/13 (15%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.25.	Developing memory skills		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**2/13 (15%)**	**3/13 (23%)**	**2/13 (15%)**
Good	**8/13 (62%)**	**6/13 (46%)**	**8/13 (62%)**
Okay	1/13 (8%)	3/13 (23%)	2/13 (15%)

Not sure how to do it	1/13 (8%)	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.10.	**Participating in groupwork and seminars**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**5/13 (38%)**	**3/13 (23%)**	**3/13 (23%)**
Good	**4/13 (31%)**	**5/13 (38%)**	**6/13 (46%)**
Okay	3/13 (23%)	5/13 (38%)	4/13 (31%)
Not sure how to do it	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.26.	**Taking exams**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**4/13 (31%)**	**2/13 (15%)**	**2/13 (15%)**
Good	**4/13 (31%)**	**6/13 (46%)**	**7/13 (54%)**
Okay	5/13 (38%)	3/13 (23%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	1/13 (8%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)	0/13 (0%)

3.9.	**Making good use of lectures/taught sessions**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**4/13 (31%)**	**1/13 (8%)**	**3/13 (23%)**
Good	**6/13 (46%)**	**6/13 (46%)**	**5/13 (38%)**
Okay	1/13 (8%)	4/13 (31%)	4/13 (31%)
Not sure how to do it	1/13 (8%)	2/13 (15%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	1/13 (8%)
No idea what it means	1/13 (8%)	0/13 (0%)	0/13 (0%)

4.6.7. Decreases in *good* and *very good* for all waves of data.

A couple of the statements show a decrease in participant numbers. The largest decline was *3.6. actively listening to others* which dropped by three participants from 12/13 (92%)

to 9/13 (69%). The other statement was *3.12. managing writing tasks,* declining by one participant from 10/13 (77%) to 9/13 (69%). These are shown below.

3.6.	**Actively listening to others**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**4/13 (31%)**	**3/13 (23%)**	**4/13 (31%)**
Good	**4/13 (31%)**	**9/13 (69%)**	**5/13 (38%)**
Okay	4/13 (31%)	0/13 (0%)	3/13 (23%)
Not sure how to do it	1/13 (8%)	1/13 (8%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

3.12.	**Managing writing tasks**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**4/13 (31%)**	**3/13 (23%)**	**6/13 (46%)**
Good	**4/13 (31%)**	**7/13 (54%)**	**3/13 (23%)**
Okay	3/13 (23%)	3/13 (23%)	4/13 (31%)
Not sure how to do it	3/13 (23%)	0/13 (0%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

4.6.8. No overall change in Section 5/3 data for *good* and *very good*

Only two statements remained static from wave two to wave three. These were *3.21. using technical language* and *3.13. writing essays using academic conventions* both with 10/13 (77%) although, movement of opinion can be observed within these figures with more *very goods* than *goods* in wave three compared to wave two.

3.21.	**Using technical language**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**3/13 (23%)**	**2/13 (15%)**	**5/13 (38%)**
Good	**5/13 (38%)**	**8/13 (62%)**	**5/13 (38%)**
Okay	3/13 (23%)	2/13 (15%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	1/13 (8%)	0/13 (0%)

3.13.	Writing essays using academic conventions		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	**5/13 (38%)**	**4/13 (31%)**	**6/13 (46%)**
Good	**3/13 (23%)**	**5/13 (38%)**	**3/13 (23%)**
Okay	8/13 (62%)	3/13 (23%)	4/13 (31%)
Not sure how to do it	3/13 (23%)	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

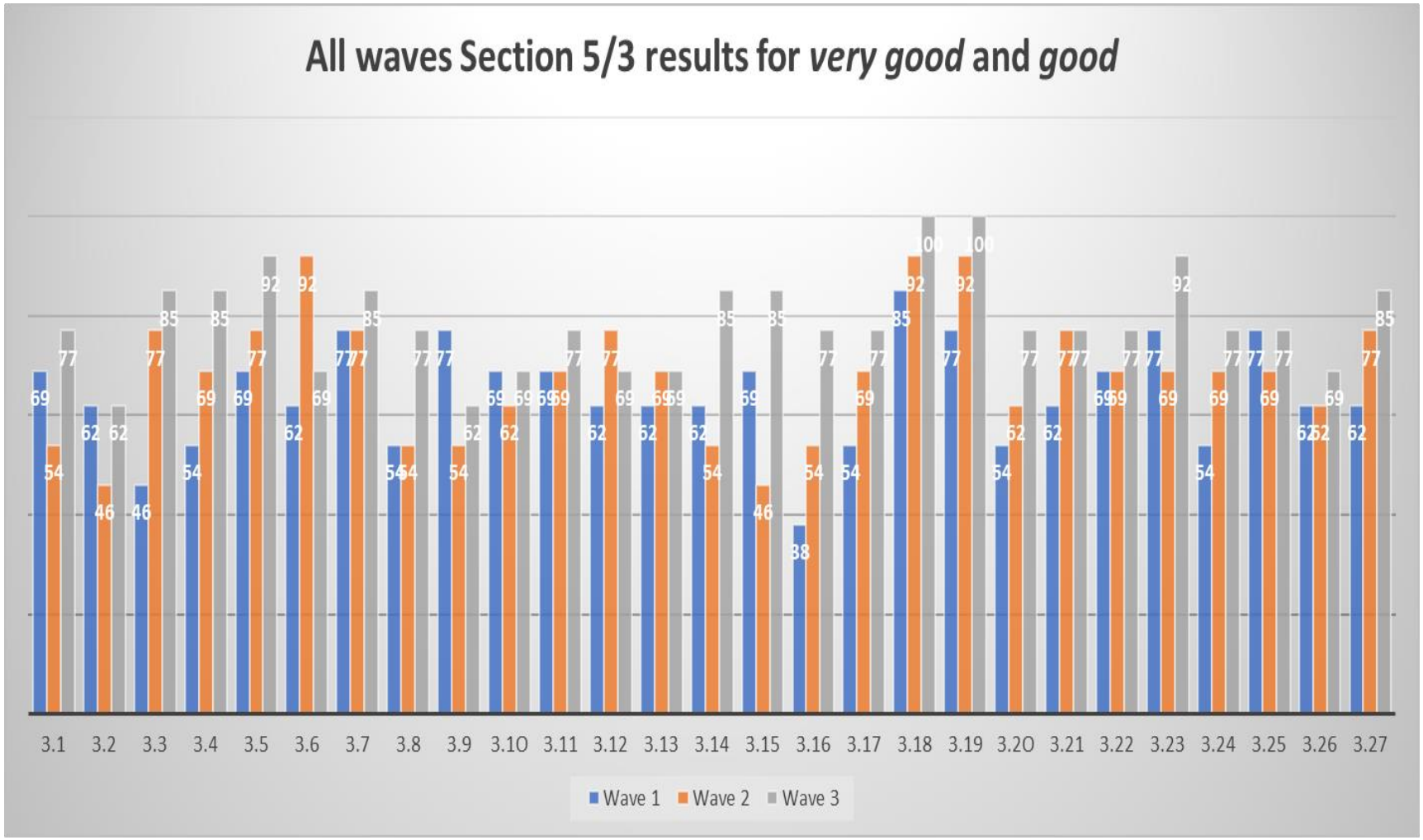
As can be observed above most of the statements in wave three saw an overall increase in comparison to the results of wave two and wave one. All the statements related to writing activities demonstrate a rise in confidence by the end of the participants courses in comparison to wave one. The movement of the data can more easily be seen in Figure 4.12. below. There were various activity statements which saw a dip mid-way through the participants programmes of study, showing a fall in confidence in capability which returned by the end of the course. This was the case for *3.1. organising myself for study, 3.2. using my study time well, 3.14. writing reports 3.15. writing a dissertation,* and *3.23. thinking critically and analytically.*

Some statements saw a clear rise from wave one to wave three, showing a growth in perceived self-confidence. This applied to *3.5. reading for academic purposes, 3.16. writing reflective assignments* and *3.20. using numbers in assignments.*

There were a few statements where the results remained consistent for two of the waves, 3.7. *searching for information, 3.8, making and using notes, 3.13. writing essays and using academic conventions, 3.21. using technical language.*

There were three statements which saw a decrease in wave three. These were 3.6. *actively listening to others, 3.9. making good use of lectures/taught sessions* and *3.12. managing writing tasks.*

Figure 4. 12.: All wave section 5/3 results for *very good* and *good*



4.6.9. Summary

There is no single clear pattern of movement that shows the participants' confidence or knowledge saw a particular and common trajectory for all the listed activities from the start of their courses to the end. Although, the evidence shows that perceived self-confidence grew overall in most academic activities over the duration of study, there was some decline in levels of confidence midway through the results in wave two. These related to perception of capability to study (*3.1*. and *3.2*.), writing reports (*3.14*) and dissertations, (*3.15*) and thinking critically (*3.23*). These changed by wave three and all rose again signifying an increase in perception of capability in those activities by the end of the participants' courses. There were also clear decreases in perceived confidence in listening activities (*3.6*) and managing writing tasks (*3.12*) by the end of the course, showing a decrease in perceived ability in these activities for some students. The data clearly demonstrates that levels of self-perceived confidence to complete the listed academic activities changed for participants over the duration of their courses over the three waves of data collection.

4.7. Levels of uncertainty

The final three responses for each statement for Section 5 and Section 3 of the SDQs were combined to reveal the academic activities that the participants were unsure about, as provided in Table 4.7. below. The orange, red and burgundy shading shows where there were choices of the categories of response for each statement.

Table 4. 7: The academic activity statements reflecting uncertainty - colour coding.

Statements reflecting uncertainty – colour coding
Not sure how to do it
No idea what to do
No idea what it means.

4.7.1. The levels of uncertainty for participants who completed all SDQs.

4.7.1.1. Wave one levels of uncertainty.

The following tables present the results of levels of uncertainty in wave one. There were 24/27 activities in which at least one person was unsure how to complete the activity. There were eighteen activities where at least one person reported they were '*not sure how to do it'* (shaded orange), nine where one or more participants had '*no idea what to do'* (shaded red) and five in which they had '*no idea what it means'* (shaded burgundy).

The statements highlighted in burgundy *(no idea what it means)* included, *5.16. writing reflective assignments, 5.9. making good use of lectures and taught sessions, 5.21. using technical language,* and 5.*20. using numbers in assignments.* Again, there is no clear area of academic activity which can be highlighted as an issue for all, but a mix of issues.

5.16.	**Writing reflective assignments**
	Wave one, Number of Participants (%)
Very good	2/13 (15%)
Good	3/13 (23%)
Okay	4/13 (31%)
Not sure how to do it	2/13 (15%)
No idea what to do	1/13 (8%)
No idea what it means	1/13 (8%)

5.9.	**Making good use of lectures/taught sessions**
	Wave one Number of Participants (%)
Very good	4/13 (31%)
Good	6/13 (46%)
Okay	1/13 (8%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	1/13 (8%)

5.21.	**Using technical language**
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	5/13 (38%)
Okay	3/13 (23%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	1/13 (8%)

5.20.	Using numbers in assignments
	Wave one Number of Participants (%)
Very good	2/13 (15%)
Good	5/13 (38%)
Okay	5/13 (38%)
Not sure how to do it	0/13 (0%)
No idea what to do	0/13 (0%)
No idea what it means	1/13 (8%)

There were a small number of participants in the *no idea what to do*, red category, in wave one. These included *5.16. writing reflective assignments* (which is included in the list above*), 5.24. evaluating my own and others' arguments,* 5.3. *thinking creatively, 5.1. organising myself for study, 5.10. participating in groupwork and seminars, 5.18. avoiding cheating and plagiarism,* and *5.23. thinking critically and analytically.* There was no clear specific type of activity that the participants were unsure of, but a variety of different academic activities.

5.24.	Evaluating my own and others' arguments
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	4/13 (31%)
Okay	3/13 (23%)
Not sure how to do it	2/13 (15%)
No idea what to do	2/13 (15%)
No idea what it means	0/13 (0%)

5.3.	Thinking creatively
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	3/13 (23%)
Okay	5/13 (38%)
Not sure how to do it	1/13 (8%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.1.	Organising myself for study
	Wave one Number of Participants (%)
Very good	6/13 (46%)
Good	3/13 (23%)
Okay	3/13 (23%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.10.	Participating in groupwork and seminars
	Wave one Number of Participants (%)
Very good	5/13 (38%)
Good	4/13 (31%)
Okay	3/13 (23%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.18.	Avoiding cheating/plagiarism
	Wave one Number of Participants (%)
Very good	7/13 (54%)
Good	4/13 (31%)
Okay	1/13 (8%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

5.23.	Thinking critically and analytically
	Wave one Number of Participants (%)
Very good	5/13 (38%)
Good	5/13 (38%)
Okay	2/13 (15%)
Not sure how to do it	0/13 (0%)
No idea what to do	1/13 (8%)
No idea what it means	0/13 (0%)

The wave one academic activities, shaded orange, that the participants were *not sure how to do,* include those seen above, and *5.15. writing a dissertation, 5.2. using my study time well, 5.4. solving problems, 5.5. reading for academic purposes, 5.6. actively listening to others* and *5.7. searching for information.*

5.2.	**Using my study time well**
	Wave one Number of Participants (%)
Very good	4/13 (31%)
Good	4/13 (31%)
Okay	2/13 (15%)
Not sure how to do it	3/13 (23%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.15.	**Writing a dissertation**
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	6/13 (46%)
Okay	2/13 (15%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.17.	**Completing a research project**
	Wave one Number of Participants (%)
Very good	2/13 (15%)
Good	5/13 (38%)
Okay	4/13 (31%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.22.	**Using computer skills for academic work**
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	6/13 (46%)

Okay	2/13 (15%)
Not sure how to do it	2/13 (15%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.4.	**Solving problems**
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	4/13 (31%)
Okay	5/13 (38%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.5.	**Reading for academic purposes**
	Wave one Number of Participants (%)
Very good	3/13 (23%)
Good	6/13 (46%)
Okay	3/13 (23%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.6.	**Actively listening to others**
	Wave one Number of Participants (%)
Very good	4/13 (31%)
Good	4/13 (31%)
Okay	4/13 (31%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

5.7.	Searching for information for assignments
	Wave one Number of Participants (%)
Very good	5/13 (38%)
Good	5/13 (38%)
Okay	8/13 (62%)
Not sure how to do it	1/13 (8%)
No idea what to do	0/13 (0%)
No idea what it means	0/13 (0%)

4.7.1.2 Wave two results for participants' uncertainty

In wave two, the number who were uncertain had clearly reduced. There were still several statements in the burgundy category (*no idea what it means*), mid-way through the programmes, which had increased in number slightly from wave one to wave two. This shows a change and a decline in perceived knowledge after one semester of study. The statements were, *3.9. making good use of lectures and taught sessions, 3.20. using numbers in assignments, 3.26. taking exams, 3.18. avoiding cheating and plagiarism, 3.21. using technical language.* These were not all the same as wave one, with the addition of *3.18* and *3.26* and the loss of *5.16. writing reflective assignments.*

3.21.	Using technical language	
	Wave one Number of Participants (%)	Wave two Number of Participants (%)
Very good	3/13 (23%)	2/13 (15%)
Good	5/13 (38%)	8/13 (62%)
Okay	3/13 (23%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	1/13 (8%)

3.18.	Avoiding cheating/plagiarism	
	Wave one Number of Participants (%)	Wave two Number of Participants (%)
Very good	7/13 (54%)	8/13 (62%)
Good	4/13 (31%)	4/13 (31%)
Okay	1/13 (8%)	0/13 (0%)
Not sure how to do it	0/13 (0%)	0/13 (0%)

No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)

3.20.	**Using numbers in assignments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	2/13 (15%)	2/13 (15%)
Good	5/13 (38%)	6/13 (46%)
Okay	5/13 (38%)	3/13 (23%)
Not sure how to do it	0/13 (0%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	1/13 (8%)

3.26.	**Taking exams**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	4/13 (31%)	2/13 (15%)
Good	4/13 (31%)	6/13 (46%)
Okay	5/13 (38%)	3/13 (23%)
Not sure how to do it	0/13 (0%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)

4.7.1.3. The red category

There was only one red category, *3.3. thinking creatively,* which was also chosen in wave one. The number of participants remained the same with one person with *no idea what to do.*

3.3.	**Thinking creatively**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	3/13 (23%)	0/13 (0%)
Good	3/13 (23%)	10/13 (77%)
Okay	5/13 (38%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	0/13 (0%)
No idea what to do	1/13 (8%)	1/13 (8%)
No idea what it means	0/13 (0%)	0/13 (0%)

4.7.1.4. The orange category

There were several academic activities the participants were *not sure how to* complete in wave two, the orange category. These included *3.27 evaluating their work, 3.11. making*

presentations, which was new to the list compared to wave one*. 3.9. making good use of lectures and taught sessions, 3.17. completing a research project, 3.13. writing essays using academic conventions, 3.24. evaluating their own and other peoples' arguments, 3.25, developing memory skills, 3.14. writing reports, 3.2. using study time well, and 3.15, writing a dissertation.*

3.27.	**Evaluating my work**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	5/13 (38%)	2/13 (15%)
Good	3/13 (23%)	8/13 (62%)
Okay	2/13 (15%)	1/13 (8%)
Not sure how to do it	3/13 (23%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.11.	**Making presentations**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	1/13 (8%)	2/13 (15%)
Good	8/13 (62%)	7/13 (54%)
Okay	4/13 (31%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.9.	**Making good use of lectures/taught sessions**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	4/13 (31%)	1/13 (8%)
Good	6/13 (46%)	6/13 (46%)
Okay	1/13 (8%)	4/13 (31%)
Not sure how to do it	1/13 (8%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	1/13 (8%)	0/13 (0%)

3.17.	**Completing a research project**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	2/13 (15%)	1/13 (8%)

Good	5/13 (38%)	8/13 (62%)
Okay	4/13 (31%)	2/13 (15%)
Not sure how to do it	2/13 (15%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.13.	**Writing essays using academic conventions**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	5/13 (38%)	4/13 (31%)
Good	3/13 (23%)	5/13 (38%)
Okay	8/13 (62%)	3/13 (23%)
Not sure how to do it	3/13 (23%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.24.	**Evaluating my own and others' arguments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	3/13 (23%)	2/13 (15%)
Good	4/13 (31%)	7/13 (54%)
Okay	3/13 (23%)	3/13 (23%)
Not sure how to do it	2/13 (15%)	1/13 (8%)
No idea what to do	2/13 (15%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.25.	**Developing memory skills**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	2/13 (15%)	3/13 (23%)
Good	8/13 (62%)	6/13 (46%)
Okay	1/13 (8%)	3/13 (23%)
Not sure how to do it	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.14.	**Writing reports**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	4/13 (31%)	2/13 (62%)

Good	4/13 (31%)	5/13 (38%)
Okay	2/13 (62%)	5/13 (38%)
Not sure how to do it	3/13 (23%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.16.	**Writing reflective assignments**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	2/13 (62%)	0/13 (0%)
Good	3/13 (23%)	7/13 (54%)
Okay	4/13 (31%)	5/13 (38%)
Not sure how to do it	2/13 (62%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)
No idea what it means	1/13 (8%)	0/13 (0%)

3.2.	**Using my study time well**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	4/13 (31%)	0/13 (0%)
Good	4/13 (31%)	6/13 (46%)
Okay	2/13 (15%)	6/13 (46%)
Not sure how to do it	3/13 (23%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

3.15.	**Writing a dissertation**	
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**
Very good	3/13 (23%)	2/13 (15%)
Good	6/13 (46%)	4/13 (31%)
Okay	2/13 (62%)	6/13 (46%)
Not sure how to do it	2/13 (62%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)

4.7.1.5. Wave three, results for participants' levels of uncertainty.

In the final wave, there was an increase and a change to the number of red category statements (*no idea what to do*). These included *3.8. making and using notes* and *3.9.*

making good use of lectures and taught sessions, neither of which featured in wave two in that category.

5.8.	Making and using notes		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	5/13 (38%)	2/13 (15%)	4/13 (31%)
Good	2/13 (15%)	5/13 (38%)	6/13 (46%)
Okay	4/13 (31%)	5/13 (38%)	2/13 (15%)
Not sure how to do it	2/13 (15%)	1/13 (8%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	1/13 (8%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.9.	Making good use of lectures/taught sessions		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	4/13 (31%)	1/13 (8%)	3/13 (23%)
Good	6/13 (46%)	6/13 (46%)	5/13 (38%)
Okay	1/13 (8%)	4/13 (31%)	4/13 (31%)
Not sure how to do it	1/13 (8%)	2/13 (15%)	0/13 (0%)
No idea what to do	0/13 (0%)	0/13 (0%)	1/13 (8%)
No idea what it means	1/13 (8%)	0/13 (0%)	0/13 (0%)

There were no statements by the end of the participants' courses which they no longer understood (the burgundy category), but there were still twelve statements in the orange category (*not sure how to do it*) chosen by at least one person each. This is evidence of remaining uncertainty in some academic activities, despite their course having ended. These related to *3.26 taking exams, 3.1. organising myself for study, 3.3. thinking creatively, 3.6. actively listening to others, 3.11. making presentations, 3.15. writing a dissertation, 3.16. writing reflective assignments, 3.21. using technical language, 3.23. thinking critically and analytically, 3.24. evaluating my own and others' arguments, 3.25. developing memory skills and 3.27. evaluating my work.*

5.15.	Writing a dissertation		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	3/13 (23%)	2/13 (15%)	4/13 (31%)

Good	6/13 (46%)	4/13 (31%)	7/13 (54%)
Okay	2/13 (62%)	6/13 (46%)	1/13 (8%)
Not sure how to do it	2/13 (62%)	1/13 (8%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.1.	**Organising myself for study**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	6/13 (46%)	3/13 (23%)	4/13 (31%)
Good	3/13 (23%)	4/13 (31%)	6/13 (46%)
Okay	3/13 (23%)	5/13 (38%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.16.	**Writing reflective assignments**		
	Wave one Number of Participants (%)	***Wave two Number of Participants (%)***	***Wave three Number of Participants (%)***
Very good	*2/13 (62%)*	*0/13 (0%)*	*3/13 (23%)*
Good	*3/13 (23%)*	*7/13 (54%)*	*7/13 (54%)*
Okay	*4/13 (31%)*	*5/13 (38%)*	*2/13 (15%)*
Not sure how to do it	*2/13 (62%)*	*1/13 (8%)*	*1/13 (8%)*
No idea what to do	*1/13 (8%)*	*0/13 (0%)*	*0/13 (0%)*
No idea what it means	*1/13 (8%)*	*0/13 (0%)*	*0/13 (0%)*

5.23.	**Thinking critically and analytically**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	5/13 (38%)	2/13 (15%)	3/13 (23%)
Good	5/13 (38%)	7/13 (54%)	9/13 (69%)
Okay	2/13 (15%)	4/13 (31%)	0/13 (0%)
Not sure how to do it	0/13 (0%)	0/13 (0%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.3.	Thinking creatively		
	Wave one Number of Participants (%)	Wave two Number of Participants (%)	Wave three Number of Participants (%)
Very good	3/13 (23%)	0/13 (0%)	2/13 (15%)
Good	3/13 (23%)	10/13 (77%)	9/13 (69%)
Okay	5/13 (38%)	2/13 (15%)	1/13 (8%)
Not sure how to do it	1/13 (8%)	0/13 (0%)	1/13 (8%)
No idea what to do	1/13 (8%)	1/13 (8%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.27.	Evaluating my work		
	Wave one Number of Participants (%)	Wave two Number of Participants (%)	Wave three Number of Participants (%)
Very good	5/13 (38%)	2/13 (15%)	4/13 (31%)
Good	3/13 (23%)	8/13 (62%)	7/13 (54%)
Okay	2/13 (15%)	1/13 (8%)	1/13 (8%)
Not sure how to do it	3/13 (23%)	2/13 (15%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

	Making presentations		
	Wave one Number of Participants (%)	Wave two Number of Participants (%)	Wave three Number of Participants (%)
Very good	1/13 (8%)	2/13 (15%)	5/13 (38%)
Good	8/13 (62%)	7/13 (54%)	5/13 (38%)
Okay	4/13 (31%)	2/13 (15%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	2/13 (15%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.24.	Evaluating my own and others' arguments		
	Wave one Number of Participants (%)	Wave two Number of Participants (%)	Wave three Number of Participants (%)
Very good	3/13 (23%)	2/13 (15%)	4/13 (31%)
Good	4/13 (31%)	7/13 (54%)	6/13 (46%)
Okay	3/13 (23%)	3/13 (23%)	2/13 (15%)

Not sure how to do it	2/13 (15%)	1/13 (8%)	1/13 (8%)
No idea what to do	2/13 (15%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.25.	**Developing memory skills**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	2/13 (15%)	3/13 (23%)	2/13 (15%)
Good	8/13 (62%)	6/13 (46%)	8/13 (62%)
Okay	1/13 (8%)	3/13 (23%)	2/13 (15%)
Not sure how to do it	1/13 (8%)	1/13 (8%)	1/13 (8%)
No idea what to do	1/13 (8%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

5.26.	**Taking exams**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	4/13 (31%)	2/13 (15%)	2/13 (15%)
Good	4/13 (31%)	6/13 (46%)	7/13 (54%)
Okay	5/13 (38%)	3/13 (23%)	2/13 (15%)
Not sure how to do it	0/13 (0%)	1/13 (8%)	2/13 (15%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	1/13 (8%)	0/13 (0%)

5.6.	**Actively listening to others**		
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Very good	4/13 (31%)	3/13 (23%)	4/13 (31%)
Good	4/13 (31%)	9/13 (69%)	5/13 (38%)
Okay	4/13 (31%)	0/13 (0%)	3/13 (23%)
Not sure how to do it	1/13 (8%)	1/13 (8%)	1/13 (8%)
No idea what to do	0/13 (0%)	0/13 (0%)	0/13 (0%)
No idea what it means	0/13 (0%)	0/13 (0%)	0/13 (0%)

4.7.2. Summary

The data shows that the participants perceptions of their ability changed over the period of their PGT study, and levels of uncertainty diminished over the time of their programmes. However, there were still clear levels of uncertainty for a few people relating

to various activities once they had completed their courses. These related to taking exams, organising self for study, thinking creatively, listening to others, making presentations, writing a dissertation, reflective writing, using technical language, critical thinking, the ability to evaluate and memory skills. Many of these academic activities are potentially those required at postgraduate level rather than undergraduate level study.

Making and using notes and good use of lectures and taught sessions appeared in the *no idea what to do* red category by the end of the courses, for one person each. Therefore, again the data reinforces there is no evidence of a particular 'type' of activity such as writing or listening that is consistently an issue for all the participants. There were also no listed academic activities that at some point over the duration of programmes everyone was certain about.

4.8. Responses to Section 2, all three waves

Section 2 of the questionnaire gave three negatively posed statements. These asked the participants whether they considered quitting the course, if they were waiting for the sessions to end, and if they did poorly in tests. This was an attempt to assess their commitment to studying, and self-perception of ability to perform well.

For the first Section 2 statement, *I feel like quitting the course,* the results show there was evidence of change, with a slight increase in people contemplating quitting their course in wave three (see Table 4.8. below). This provides evidence that the participants may have returned to their initial feelings at the start of their courses with the data mirroring exactly the wave one results in wave three. There was a very minor change in wave two, with a slightly more positive outlook in relation to courses, but it was not maintained.

Table 4. 8.: All 3 questionnaire respondents' result for 2.1 *I feel like quitting the course.*

2.1. I feel like quitting the course			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of participants (%)**
Never	8/13 (62%)	9/13 (69%)	8/13 (62%)
Rarely	1/13 (8%)	2/13 (15%)	1/13 (8%)
Sometimes	3/13 (23%)	2/13 (15%)	3/13 (23%)
Often	1/13 (8%)	0/13 (0%)	1/13 (8%)

Always	0/13 (0%)	0/13 (0%)	0/13 (0%)

The second statement results, *I am waiting for the sessions to end,* show evidence that more students were waiting for the session to end at the start and mid-way through their courses than they were at the end. The results in Table 4.9. below, indicate that three of the participants were *sometimes* waiting for the sessions to end by the end of their courses, which provides evidence of a potential increase in their commitment to their sessions compared to mid-way through the course.

Table 4. 9: All 3 questionnaire respondents result for 2.2. *I am waiting for the sessions to end.*

2.2. I am waiting for the teaching sessions to end			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of participants (%)**
Never	4/13 (31%)	4/13 (31%)	6/13 (46%)
Rarely	6/13 (46%)	6/13 (46%)	4/13 (31%)
Sometimes	1/13 (8%)	1/13 (8%)	3/13 (23%)
Often	1/13 (8%)	2/13 (15%)	0/13 (0%)
Always	1/13 (8%)	0/13% (0%)	0/13 (0%)

The final statement of the section, *I do poorly in tests,* shows a slight increase in positive self-belief over the duration of the participants' courses (see Table 4.10 below). Only one person each in wave one and wave two often thought they did poorly in tests, which changed in wave three. The other results remained similar over the final two waves compared to wave one and demonstrate some changes of opinions.

Table 4. 10: All 3 questionnaire respondents' results for *2.3. I do poorly in tests*

2.3. I do poorly in tests			
	Wave one Number of Participants (%)	**Wave two Number of Participants (%)**	**Wave three Number of Participants (%)**
Never	4/13 (31%)	7/13 (54%)	7/13 (54%)
Rarely	5/13 (38%)	2/13 (15%)	3/13 (23%)
Sometimes	3/13 (23%)	3/13 (23%)	3/13 (23%)
Often	1/13 (8%)	1/13 (8%)	0/13 (0%)
Always	0/13 (0%)	0/13 (0%)	0/13 (0%)

4.8.1. Summary

The evidence above shows that there are slight changes in the data relating to how the participants felt about the three negatively worded statements of Section 2 of the questionnaires. Most of the participants *rarely* or *never* contemplated the actions suggested in the statements, but just over 20%, which is three to four students for each statement considered quitting the course, were waiting for the sessions to end, or thought they did poorly in tests by the end of their courses. This demonstrates elements of negativity by almost a quarter of the participants who completed all three questionnaires in their perception of their capability, and evidence of a possible lack of commitment to their work.

4.9. Chapter Conclusion

This chapter has presented the quantitative data taken at three points near the beginning, middle and the end of the participants courses. It has provided evidence of the type of academic activities the participants were required to complete on their UG courses, and which academic activities they thought were most required on their PGT programmes as they began their studies. It found that many types of writing activities required at PGT level were unfamiliar at the start of students' courses, as they had not necessarily experienced them on their UG courses. The focus then moved to the thirteen participants who completed all three questionnaires to track any changes in their responses over the three waves of data collection. They were asked to consider their level of agreement in their knowledge and ability to complete the listed academic activities, and then also their disagreement. The data demonstrated changes in their opinions over time, with varying patterns in the movement of their responses with both increases and decreases in each wave in their self-perception of ability to complete the academic activities. They were then asked how ‘good’ they thought they were at the activities, to assess their levels of confidence. The data again showed varying patterns and how these changed in each wave of data collection. It demonstrates a lack of consistency in the type of activities in which opinions altered, with confidence increasing in some for a few people, and decreasing for others in the same activities. It also included consideration of the academic activities where the participants had faced degrees of uncertainty, and how this diminished over time, for most but not all. Finally, it examined the three negatively posed statements to ascertain potential changes in feelings about studying, and in relation to their ability, which also showed very slight movements and changes of opinions. Overall, the movement of data was variable, as were the levels of corresponding self-perceived

knowledge, ability, and confidence in relation to individual academic activities, but there is clear evidence of changes in the self-perception of the participants over the three waves. Fewer participants were uncertain about many of the academic activities by the end of their courses, and levels of self-perceived confidence increased in most of the activities, but not all, or for all participants. The next chapter will present the data relating to the eight interview participants, which mostly, but not exclusively consists of examination of the qualitative data collected over the three waves of data collection.

Chapter 5 Findings: The interview participants

5.1. Introduction

This chapter will consider the emergent themes derived from the data relating to the eight interview participants, which is mostly based on the semi-structured interviews across the three waves of data collection, although it also includes some of their individual quantitative questionnaire data responses. It begins with consideration of the type of academic activities the participants said they required on their UG courses, and their reflections on the differences they found between those activities, and what they thought was required on their PGT courses at the start of their programmes. It looks at the strategies the participants reported for how they approached the academic activities they needed to complete, and how these changed over time. It then presents the evidence of the participants level of knowledge of what was required of them across the three waves of data collection. It discusses the participants creation of various support structures. This is followed by an overview of their perceptions and attitudes to working with others in general and in group work. The participants spent time over the duration of their courses reflecting on feedback and grades they received for their assessed PGT work. This revealed different reactions and feelings which linked to their levels of confidence. The findings show evidence of how these also changed over the duration of their studies. Some participants had negative self-perceptions during their time as a PGT student which are discussed. Finally, the participants ideas of success and their aim for studying a PGT programme is revealed. The links of the findings to ASC are discussed in Chapter 6.

5.2. The interview participants

There was a total of eight interview participants, four male and four female. They were selected as a purposeful sample via their completion of the questionnaires as discussed previously in Chapter 3. They were from several different countries (also see Chapter 3, Table 3.13.). These were India, Nigeria, Pakistan, Bahrain, and Norway. They were aged 22 to 38 at the start of their courses. They represented three different faculties and were on different PGT courses. There were two participants from the Faculty of Business & Law, who were studying Business with Financial Management and Business Analytics. Three participants from Engineering and Environment studying Construction Project Management, Microelectronics and Communications and Engineering Management. Finally, there were three participants from Health and Life Sciences studying Clinical Exercise Physiology, Healthcare Management, and Occupational and Organisational

Psychology. They were interviewed following the completion of each questionnaire a few weeks into their first semester of study (wave one), then a few weeks into their second semester of their courses (wave two) and then once they had completed all their work at the end of their courses (wave three).

5.3. Undergraduate and postgraduate comparisons

The self-descriptive questionnaire (SDQ) questions as outlined in the previous chapter asked the participants to consider their beliefs about the academic activities required on both their undergraduate and postgraduate courses. The semi-structured interviews added to this data and provided more details concerning the changes the participants experienced when they considered the requirements of their previous UG studies compared to their new PGT studies. The type of academic activities the participants were familiar with is presented first, and then the differences they observed between the two dimensions (UG & PGT study) follow. These questions were part of the wave one data collection, and the first semi structured interviews, a few weeks into the beginning of their PGT programmes (see Chapter 3, Table 10. for timings).

5.3.1. The type of skills participants thought were required on their UG courses.

The type of academic activities experienced by the interview participants on their UG courses were not all the same, especially in relation to the type of assessments they experienced. The following section groups the participants by broad geographical areas in which they studied their UG programmes to reveal emergent commonalities and differences. The first group are those who studied in neighbouring countries in South Asia where there was seemingly a reliance on exams as P1 stated:

> We don't need to worry about assignments. (P1, interview 1)

P1 described how his marks were comprised. He received 10% of his final mark based on 'quizzes', 10% for attendance, and the remaining elements were mid-term and final exams. The academic activities he needed on his UG programme, with a reliance on exams, did not seem to reflect the type of academic activities needed on his PGT course as revealed in his interview responses. Likewise, P8 was mostly assessed via examinations. He described them as three hour written exams with questions and answers. They were marked out of 100 with questions worth 2, 10 or 15 marks. The amount of writing required was indicated by the grades awarded. For 2-mark questions

he said he would need to write 20 to 30 words, whereas for 15 marks 200 to 300 words were required. The exams were not based on memorising set answers, but applying knowledge, which is a relevant PGT requirement. He said:

> I'm bad at hearting stuff, for me it was more about understanding the concept, so I used to read the textbooks and then remember the key points, and then would elaborate that in the exam as per the question. (P8, interview 1)

The exams were worth 100% of the module, although some included an assignment worth 20%, reducing the exam to 80% of the final grade, but overall, there was a major reliance on exams. If he failed, he could retake the exam the following semester. He was also required to write a report, which was an analysis of the organisational structure of a company. It seems that this was guided by a mentor, who provided a template of what was required.

> Initially, what they gave us was a set template of which they want the report. With templates it was a lot easier to work on…so basically, just had to work collecting data and just filling in the gaps, that was it. (P8, interview 1)

This shows high levels of guidance and support and little self-reliance. The skills required for both these participants, P1 and P8, did not seem to reflect the type of academic activities thought to be required on their PGT courses.

P4 was also from the same broad geographical region as P1 and P8, and was also assessed mainly by exams, although she had to complete a project and learn about aerospace through work in a lab. However, the course was mostly assessed via exams, apart from the final year, which included an internship and a project. The exams were question and answer exams, sometimes requiring application of knowledge and other times something from memory. Attendance was also included to pass the course. Students had to attend 75% of classes to be allowed to sit the exam, which was like P1. The project she was required to complete took the form of a descriptive report concerning the process of creating a drone, which included what had been learned and future work required with a conclusion and whether it was successful. These three participants as mentioned, were from neighbouring countries in South Asia. From their description they had a similar experience of assessment on their UG study, which did not include many of the types of academic activities that were seemingly required for PGT study in the UK.

P2, P3, and P6 were all from Nigeria, which is where they studied their UG degrees. On their UG programmes they had a mix of exams and written activities, some of which may have been like the activities required at PGT level.

P2 studied on a 4-year UG course. The focus was on exams with a few assignments. The exams consisted of some multiple choice, but mainly essay type questions in a two- or three-hour exam. The assignments were mostly report based, for example, to critique the performance of a company. These activities seemed to provide some potential grounding for the type of skills on his PGT course.

P3 on his five-year course in his home country, started at the age of sixteen. The first year reiterated what he had studied for his O-levels (school level qualification usually taken at the age of around sixteen). In his second year he stated his course was more technical focussing on “broad aspects of ...engineering” (P3, interview 1). He commented that his mechatronics course started “properly” in year three when it began to focus on the subject, mechatronics. He studied eight modules each semester. Most classes required notetaking, a PGT study requirement. Exams comprised short answers but not essays. The first essay that was required was in the final year, and he had to write lab reports and descriptive essays.

Finally, P6 studied a 4-year course, on which she was required to write research papers, which included extended writing, around ten pages, with an introduction, abstract, body and conclusion. Other work consisted of computer programming, due to the nature of the course. These academic activities seem to reflect what may be required on her PGT course.

The final two participants P5 and P7, both studied in northern Europe. They were required to utilise different types of written tasks that might prepare them for PGT study. P5, on her UG course in her home country, had lots of practical work such as planning a session of workouts, assignments that included writing a literature review, and she wrote a 12,000-word dissertation. However, all the work was in her home language, apart from the reading, which was mainly in English. The skills required appear to be like those she needed at PGT level, apart from working in a different language. Whereas P7 studied her UG degree in the UK, which may be considered an appropriate grounding in the potential skills required on her PGT course. The academic activities required on the course

consisted of activities that contributed to role-plays, two placements, one exam, essays, a dissertation, and a report. She found these challenging due to language, as before an English course, which she had studied prior to her UG degree, she had always worked in her home language, and was unclear how to properly structure the assignments. Writing was a challenge for her, including how:

> ...to build a good structure and its flow then from the introduction to the conclusion and make the parts connect. (P7, interview 1)

Previous country of study and the type of academic activities with which the participants were required to engage may be key to whether international PGT students' UG system of assessment provided any helpful type of preparation for studying at PGT level in the UK. These eight participants seem to have experienced three differing types of UG educational styles, which appeared to depend on the region of the world they studied. Although this division may to some extent be too simplistic, and could be based on individual institutions, as the Nigerian participants had slightly differing experiences of academic activities. Most of the participants were assessed by exams and appear to have had limited extended writing experience particularly those who studied in the Southern Asia countries and two of the Nigerians. Whereas P6, P5 and P7, who studied in northern Europe and one Nigerian institution had more experience of the type of academic activities required, but noting P5 used a different language, and P7 was new to working in English on her UG course, so was uncertain about her capabilities. These findings support and reflect those found in the data in SDQ1, which showed that different types of extended writing tasks were not something many had needed on their UG programmes.

5.3.2. Reflection on initial differences between the UG and PGT programmes.

Given their prior experiences, as mentioned above, in the first set of interviews undertaken shortly after commencing PGT study, the participants were asked to reflect on the main differences they had noticed so far between their UG and PGT courses. The following sections outline the main issues reported.

5.3.2.1 Writing and lack of exams

Different types of writing tasks and lack of exams were commented upon by some of the participants. P1 thought the PGT course was quite different, especially how to write an academic paper, produce a portfolio and create an academic poster. These were unfamiliar despite having some experience of writing a dissertation in the final year of his UG course (which he did not mention in his earlier comparison discussion). P6 found the

major differences between the PGT and UG courses was the lack of exams, instead she found there were papers to write. P4 also sat exams on her UG course and was finding writing assignments difficult, especially the correct use of referencing as she never had to use it in the same way on her UG course. She did write a research report on her UG course, but she was finding incorporating other people's research from research papers difficult, as she had her own thoughts about the topics that did not match what the research papers said:

> It was quite really difficult because I think something different, but the research paper says something different, and I have to match up with them. (P4, interview 1)

P8 thought his PGT and UG courses were very different, commenting:

> It is totally different, it's like two sides of a coin, totally different, totally. (P8, interview 1)

He reflected that on his UG course he would only study two days prior to his exams and then go and sit them, but on the PGT course he was required to conduct constant research and work consistently. He felt that this was the biggest difference. He stated:

> What I feel different here, it's more self-learning...Here it is more to do with discussions and adding ideas and sharing ideas like inputs ... it's something new that you learn always, so it's really interesting. I like this concept of learning, yeah. (P8, interview 1)

P3 also commented on the contrast between writing on his UG course compared to his PGT studies. He thought the system of work was stricter on the PGT course compared to his UG programme. He stated:

> I think the difference in the systems is that they were not so strict about the writing over there... (P3, interview 1)

Like many of the other participants P2 was also used to taking exams on his UG course, which he said he preferred as he was used to them. However, he acknowledged that there were disadvantages to exams as a person may not be able to deliver their best on the day.

5.3.2.2. Self-reliance

Some of the participants found they had to be more self-reliant than they had been used to on their UG course. P2 thought the principal difference on the PGT course was the necessity for self-study and more was expected with writing assignments. P6 also thought

that responsibility-for-self was a noticeable difference in terms of managing the work to write the papers, she stated:

> It is more learning how to manage my time, manage myself I have to do. (P6, interview 1)

5.3.2.3. Support and being known.

The level of support available was a noticeable difference for a few of the participants. P7 was struggling with the level of the support offered. On her UG course she had the same supervisor for the entire three years, but on her PGT course she had a different tutor for each module. She was concerned that the PGT tutors would not know her, and her strengths and weaknesses. P5 also commented on tutor support and its reduction on her PGT course in comparison to her UG programme. This was the same for P6 who like P5 and P7, thought she was more supervised on her UG course.

5.3.2.4. Use of language and complexity.

Often it is assumed that international students have issues with use of English, which is why some commentators suggest they struggle to study at PGT level as discussed in the literature review. Only two participants mentioned language as an issue near the beginning of their courses. P5 had studied her UG course mostly in Norwegian, However, this was not considered a major issue, but she thought that was a difference between her UG and PGT courses. Apart from that most things she thought were similar overall. The biggest difference she believed was that the PGT course was more complex. Another participant, P7 was concerned about her capability in the use of English. In her wave one interview, she relayed how she was used to working in Arabic before she completed her UG course in the UK. Despite passing her UG course, she was still finding working in English challenging. However, language was not an issue that was raised by most of the participants.

5.3.3. Summary

The interviews mostly support the findings of the SDQ1 data from near the beginning of the participants courses in which different types of writing activities were what many had experienced the least on their UG courses. The participants also confirmed the change from mostly exams for many as the main means of assessment. However, in addition self-reliance and self-management, not as much support, and use of English where among some of the other areas highlighted as differences. Although, these issues were

only raised by a small number of people suggesting that they were not much of an issue for the majority. There was little commonality in the findings in wave one. They all focused on slightly different issues and skills as causes of concern or noticeable differences compared to their UG study. This demonstrates there is a lack of commonality in their understanding and previous experience of studying. This in turn may impact on the potential support they may require. What is clear is that they thought about and reflected on themselves and their abilities in relation to the academic activities required on their courses in both domains, UG and PGT.

5.4. Strategising

The participants were asked whether they had strategies for completing the work required of them on their courses. This led to some interesting revelations and evidence of clear 'strategising', which relates to the decisions and choices they made when attempting to complete the academic activities that were required of them on their PGT courses. This is a challenge to the idea in the literature by some, often those who are required to work with international students, that they are incapable, and need 'fixing', due to lack of ability.

5.4.1. Initial study strategies

The participants revealed how they approached the work required on their courses, although half the participants did seem to have strategies, they were not clear what these were at the beginning of their courses for completing the work required. This seemed to be the case for P1, P2, P3 and P4, with P1 believing:

> ...I don't know how it works here. (P1, interview 1)

Despite these four participants demonstrating they did not have a clear strategy, they all engaged with the work required on their PGT courses. P2 had developed an approach to his work, which he seemed to have thought carefully about. This was to assume knowledge, and to utilise all opportunities to gather what was required.

> Okay, my strategy ... I told myself I should assume to come with a preconceived notion, I know this already, ... My strategy is to attend the classes because I discovered that ... in the lectures, they dish out so many things that you might not necessarily see in the lecture slides, they go deeper, so for me, attending lectures get as much as you...from the lecturers, ask every question you need to ask. Even if they say the things you know, it helps to reiterate them and get to know them better... (P2, interview 1)

He maintained his strategy in his second semester. He still thought attending everything was important, but he had also added the importance of research, which he had not mentioned previously.

> ..… I try and do more research. (P2, interview 2)

In terms of completing his assignments he decided which activity was the most urgent and worked on that, but generally he did not seem to have a clear strategic plan of action, more of a what needs to be completed first approach, which could be argued was his strategy.

> Because sometimes we just have some tasks to do too with some lecture groups...assignments I kind of vary it this time around I go with...which one is more relevant at this point in time which one is urgent... (P2, interview 2)

P3 had a completely different approach to P2's strategy for completing academic work, which was to start it as soon as possible:

> I just start from day one. I think it is as just as simple as that. So, some of them, the tasks, the assessment even before the offered time to start, I'd already started them earlier. (P3, Interview 1)

He also suggested his approach was not very systematic:

> It is a bit haphazard, ... for the programming. The normal strategy would be like maybe create a flow chart to understand the system to reproduce the same in the programme and then write the written report of the programme. I'm a bit more scattered. I jump straight to the last bit and start messing around with the programmes and changing them and playing around with them … (P3, Interview 1)

He seemed to want to have fun with the work required to make it more interesting, to experiment, basically play with it. He would try first to see how things worked and then add the theory later. He was also a little competitive and wanted to do better than his classmates. He said, in reference to them:

> When we speak and then I hear where they are, it's like, okay, so if they are here, I push. (P3, interview 1)

Midway through the course, P3 did not think his study strategy had changed since the first interview, although he said he had changed the amount of time he invested in completing tasks.

> ...what has changed is probably the amount of time I actually invest. Yeah, so last semester I was pulling all-nighters, but this semester, just a couple. (P3, interview 2)

Asked why he had seemingly relaxed a little in his approach, the reply was a little surprising:

> I feel fat, I just feel lazy. (P3, interview 2)

This was due to the long summer break he had. In terms of study strategy, he seemed to be planning based on which work needed priority based on the potential marks it may score.

> …. I actually assign priority, this time like based on the marks... (P3, interview 2)

Moving to P4, her strategy involved creating a plan for her work. She wrote what she intended to do in a day, although, the experience she related concerned preparing for her exams. She said she created a schedule for her UG course, but it was not apparent what her plan was for her PGT course, she did not seem to have one.

P5, P6, P7 and P8 all seemed to have clearly defined strategic processes for their approach to academic work, unlike the previous four participants. P5 had a clear strategy for approaching a writing assignment. This included identifying key words for specific sections of writing and writing definitions. She wrote the main body before completing her introduction and conclusion.

> I wrote down key words about what I want in this section and this section, and then I start writing mostly, first I start writing like the definitions if I have to have a definition in the introduction, the main part, and then I write the full introduction and then the conclusion. (P5, interview 1)

P6 used a slightly different strategy to P5 to complete her academic work which was by weight. This was not weight as in the mark it could potentially receive, although that was part of her considerations, but she described it as the intellect and resources needed to complete the work required.

> ... it is also about how much it requires from me in terms of... my intellect and using resources as well. So, it is also measuring by that, so if I realise that this one would require a lot of reading to do and a lot of writing to do I know that I have to start it early before the others. (P6, interview 1)

In terms of planning, she had a carefully written plan for the week.

> I write about what I'm supposed to do this week, okay this week I'm working on this particular paper, or I'm working on these two papers, I portion them as to what day of the week I'm going to do them in... I'm conscious of everything I have to do. Sometimes I set reminders on my phone. (P6, interview 1)

The next person who demonstrated thinking was P7. She thought ahead creating an outline, collecting articles to read, which she often summarised, sometimes she just summarised the main points. This was a technique she used on her UG dissertation. She thought the summarising helped her write more easily. The reason she started with an outline was to assess whether she had understood the question.

> I always start with the structure so find out whether I understand the question and what the question wants from me. (P7, interview 1)

P8 used a similar technique to P7 in the sense that he collected articles to filter to decide what was appropriate. He decided on suitable data based on recency, or relevance if historical.

> ...the data should be more relevant or recent. I will only gather information from recent literatures, if they want a history thing I would go back, so depending on the assignment, or the work, I work on that. (P8, interview 1)

As he collected data, he paraphrased it and structured it according to flow, introduction, main body and so on. P8 said his initial strategy was to work on one assignment at a time, and he used the feedback received to improve his next piece of work. This was the strategy he continued throughout his course.

The data shows that the participants all had very different approaches to the work required. Half of them did not think or appear to have clearly defined approaches but nonetheless managed to complete the work required, despite a potential feeling of being unsure, working 'haphazardly' or pretending that they knew what was required until they finally did know. The other half of the participants had defined processes they could draw upon. Thereby they all demonstrated a form of resilience and determination to complete the work required by whatever means they chose.

5.4.2. Changes to study strategies

At the end of the course in wave three, when all the academic work had been completed, P1 was still not very clear on what he needed to do, but believed he had done enough to pass, although, without knowing at what grade. He appeared to have a great sense of self-belief and determination which persisted and grew over the two years of his course. He commented on his doubts and his determination to complete the course at whatever standard he could achieve.

> I still feel a bit doubtful, but in the start if you asked me and I was very much, you know, unsure about things, but now if I do an assignment academically, I will be sure, okay, I can pass this thing, but I am not sure like with what grades. Before that I was not even sure I would pass. So now, I can actually make sure what I've done would get me through the passing criteria but I'm not sure how long it will take me, to what grades it could take me, but it will get me to the passing line. (P1, interview 3)

By the end of his course, P1 implied he had developed a strategy after not having one at the start of his course.

> ...I didn't have a strategy when I started. I'm like okay, let's see what comes and then decide how to deal with that. I usually do that; I don't plan much. I just let the things as they are. I just see the flow and just float with that flow..., but just see how things are and then make decisions on the spot... I don't plan much, don't organise. (P1, interview 3)

In contrast, P2 thought his strategy for studying had changed during his course, which included realising that PGT study required little textbook usage and wider reading was expected. This seems to have been a consistent thought throughout his time on his course, it was mentioned in all three interviews. This led to a wider reading strategy as he described.

> Coming here most lecturers tell there is no recommended textbook, there is a few lists of textbooks you can use but they advise that you get current journals, get peer reviewed journals and all that, so I had to switch to a new strategy, which was get as much as you can get. Read widely, read widely, so I can get broader knowledge about the topic also in that area. (P2, interview 3)

This altered strategy did not begin until the second semester following the results of the first semester, and the feedback received.

At the end of his course, P3 talked at the start of the interview about how his approach had changed since he began the course. This change was from conducting extensive additional research to focusing on the aims and objectives of the modules. In semester one he did not bother to read the aims and objectives, he said:

> ...the aim and the objective of the module, it was always given, but I never bothered reading it, it was boring. (P3, interview 3)

This attitude changed quickly when he received a lower-than-expected mark.

> I kind of complained in the first semester about one of my writing tasks where we were given the proposal to write, that was one of my lowest marks back in the first semester. I really wanted to change it, so for the subsequent writing tasks I had to do in the second semester, I kind of looked at what exactly the guidelines expected, what they are looking for so yeah. I think I was trying to model my writing after that, for each of the modules. (P3, interview 3)

He may not have changed his strategy had this not occurred.

For P5 a change of strategy had been essential due to self-induced stress in her first semester. In her first semester she felt that she needed to complete everything before she could take a break, and she pushed herself, which led to what she termed a 'melt-down' over the Christmas break. She had been working very long hours and during the night trying to complete what she thought she needed to. When she could not sleep, she thought it might help to use the time to study.

> ...I didn't fall asleep. I could just use the time for doing work (P5, interview 2)

This strategy was unsustainable, and she rethought it and set herself a new working pattern, but only after she reached that breaking point.

> Now I know I will be able to finish the assignment, because now I know how to plan and stuff, and also working up a routine that I would be working from eight in the morning till five in the afternoon, and then it is just a break for the rest of the day. (P5, interview 2)

She began working on all her second semester assignments as soon as she got them. This strategy worked but was hampered by the arrival of the Coronavirus lockdown. She had to return home. In semester two she was much more familiar with what was required and how the system worked

> ...In semester 2 I know more what to expect, so I just focused on that. (P5, interview 3)

By the end of her course, like some of the other participants, the strategy P7 used for studying had changed but mainly due to the change of circumstances caused by the Coronavirus, which made it difficult to study. She was frustrated with herself that she was unable to complete the second semester assignments.

> I changed in the way to be honest, in the research, where I was just so depressed and anxious about not completing the work. I feel guilty that why I couldn't do it. If I worked so hard in the first semester, why not now. I keep blaming myself for not doing the work, until the last minute, I say to my supervisor that I will do it. I can, but to be honest I know my situation at that time it will be difficult for me to complete the work... (P7, interview 3)

5.4.3. Summary

The participants demonstrated how they reflected on their strategies, and most changed them when provided with feedback, changing external circumstances, or when new information or knowledge came to light that nudged them to take an altered direction of travel. Additionally, some also faced some individual personal struggles, which they overcame. Previous experiences and comparing what they were used to, was also a cause of anxiety for some. They all adapted to changing circumstances, apart from P7 who found herself in a very difficult situation upon returning home due to the pandemic. The others, continued to demonstrate resilience and determination to complete what was required, even though in some instances they were dealing with non-academic related situations or had to reevaluate their approach to academic work which they had previously developed and been used to.

5.5. Evidence of change: knowing what is required on a PGT course.

The participants demonstrated that they had individual approaches to the academic activities they were required to complete. However, this did not mean that they understood what other approaches were possible or how to achieve them.

The results for question *1.9 I know what is required of me to study at postgraduate level*, revealed that half of the participants did not feel they knew more about what was required of them by the end of their courses. The tables below show the change in how each of the interview participants felt about knowing what was required of them to study on their PGT courses.

Table 5. 1a - 5.1i: Change in knowledge of what is required to study at PGT level.

P1

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree			
Agree			
Neither agree nor disagree		x	x
Disagree	x		
Strongly disagree			

Table 5.1a: P1 responses to question *1.9.*

P2

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree			
Agree	x	x	
Neither agree nor disagree			x
Disagree			
Strongly disagree			

Table 5.1b: P2 responses to question 1.9.

P1 (Table 5.1a) did not know what was required of him at the start of the course, and was still unsure by the end, as seen in some of his comments in some of the sections above. Opposingly, P2 (Table 5.1b) seemed to think he knew what was required at the start of his course, but by the end the data shows he was less sure. These comments were also reflected above.

P3

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree	x	x	
Agree			x
Neither agree nor disagree			
Disagree			
Strongly disagree			

Table 5.1c: P3 responses to question 1.9.

P4

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree			
Agree			x
Neither agree nor disagree	x	x	
Disagree			
Strongly disagree			

Table 5.1d: P4 responses to question 1.9.

P3 (Table 5.1c) started with a high level of confidence, which dipped at the end of his course. Whereas P4 (Table 5.1d) started out unsure and thought she knew more by the end

P5

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree			
Agree		x	
Neither agree nor disagree			
Disagree	x		x
Strongly disagree			

Table 5.1e: P5 responses to question 1.9.

P6

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree	x	x	x
Agree			
Neither agree nor disagree			
Disagree			
Strongly disagree			

Table 5.1f: P6 responses to question 1.9.

P5 (Table 5.1e) did not know what was required of her at PGT level as she started her course, but by midway through her confidence in her abilities increased, but then decreased to not feeling like she knew what was required at the end. This was unlike P6 (Table 5.1f), who felt consistently confident in her abilities, although, this was not necessarily the data that emerged from her interviews where she expressed her lack of confidence in her abilities at the beginning of her course in wave one, due to not having studied for a few years.

> Well, I would say that I don't think I am so confident anymore. No, I feel, I don't know how to put it, but I think it is because, although initially when I was about to start school, I had this fear about writing exams and stuff because it was, I already felt I'm getting too forgetful, how I am going to cope with writing exams again. This is like 7 years after doing my UG, that's a long time away from school. (P6, interview 1)

P7

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree			

P8

1.9. I know what is required of me to study at a postgraduate level			
	Wave 1	**Wave 2**	**Wave 3**
Strongly agree			

Agree		x	x
Neither agree nor disagree	x		
Disagree			
Strongly disagree			

Table 5.1h: P7 responses to question 1.9..

Agree	x	x	x
Neither agree nor disagree			
Disagree			
Strongly disagree			

Table 5.1i: P8 responses to question 1.9.

P7 (Table 5.1h) was unsure what was required at the start of her course, but her confidence in her own abilities increased. Finally, the data shows that P8 (Table 5.1i), like P6, felt consistently about his knowledge throughout his course about what was required. Out of the eight interview participants, three felt there was a decline in their knowledge of what was required at PGT level, two showed an increase, one oscillated up and then down, and two demonstrated consistencies in their questionnaire responses throughout the duration of their programmes.

5.6. Creating self-support structures

A key strategy to navigate their way through what was required was the creation of means of support. The interview data shows that the participants sought and created personal support structures to help them complete the work required on their courses. These did not necessarily include support offered by the university systems. A wide variety of sources of support were used, including housemates, a church pastor, classmates, past students, the creation of WhatsApp groups, YouTube videos and TED talks. These will be considered further below.

5.6.1.3. The most useful choices of support

P6 also used a variety of university ready-made sources, including tutors, peers and the library, and the process of working with others she found beneficial.

> I found that for me it is much more better when I work with my peers, people in the same class, when I ask them questions and when they ask me questions, I can remember what we learnt much more easier than when I just do the reading and learn. (P6, interview 2)

However, the most interesting support P6 created was finding her own ‘study buddy’.

> I had a study buddy in school [university] that I would usually show my work to and say can you help me go through this? Can you help me read through this?

> More like a peer assessment, before I submit my final work, and I usually help her read hers as well. (P6, Interview 3)

This idea was her own initiative, it was not something the university offered and was an arrangement between the two of them.

P7 also used what might be termed “in-house support” to gather help with her work. She considered who would provide feedback to help her.

> Sometimes a friend or sometimes also I ask the lecturer if it is a short piece of work to give me feedback on how to improve my writing, so I still do that. (P7, interview 1)

She was strategic about it and assessed who would be happy to help.

> ...usually, I choose the people that I know are happy, not always, not always there is a person to check your work. (P7, interview 1)

When that support was not available, she found it very challenging as there was no one to reassure her she was producing what was required at the appropriate level. She was aware that she needed to be more self-reliant. Another technique she used to ascertain her understanding was asking her classmates. Although, it did not necessarily have a positive impact on her work. It undermined her low level of confidence and led her to compare herself with others.

> I asked my classmate who chose the one I chose, then I find that it is not that helpful...they are happy to talk with me about it but to be honest it’s not really. I don’t think at the start we are on the same track. I think his level is higher than me ... and he would like put expectation on my essays. I kind of bring more threatening to me. I don’t know I like more, not threatening - that’s not the right word, more I become more stressed because I think my work is not good enough. (P7, interview 1)

She decided to check with a tutor after her classmate, which she found more helpful.

> I spoke with the lecturer himself and he checked my work and [gave] me feedback. Wish I go for my lecturer in the first place, rather than confusing myself and comparing myself with other students. (P7, interview 1)

By semester two, P7 had created her system of support, which included the lecturers and a friend who could proofread her work. She thought she needed help with her proofreading as she found it difficult to focus when she felt stressed.

> ...when I am say, stressed, I can't really focus on what I am reading at that time, I finish my course, I sent it for proofreading, only for proofreading it is all my work. (P7, interview 2)

P2 was discerning in his choices of sources of support. When he was unsure about a skill, he made use of as many sources of support as he could find. He also went outside the institution for that help. He had a couple of sessions with his church pastor in how to structure a report. He seemed to value their input as the pastor had graduated from what P2 considered a very good university. P2 thought these sessions were:

> …quite insightful. I also intend to borrow knowledge from that. (P2, interview 2)

However, he was also very strategic in utilising every source of help available. He had also received support from his lecturers to help with his work. He said he was using all he could to ensure he could meet the course requirements,

> We have sessions, we have academic professional development courses...so I am just combining everything I can get my hands on to meet the target... (P2, interview 2)

He was also very choosy about who was good enough to help him. Previous students who had not scored highly were not on his list of potential help, which further emphasised he had a strategy to try to ensure he did well.

> ...I have to be sure of the person's score, I want to be sure that the person actually did well on that course... (P2, interview 2)

These choices and decisions regarding sources of support further illustrate the strategic side of the participants. They are actively sourcing the help they think will benefit them the most. They are not waiting to be helped. Some are also creating means of assuring they have personal support, demonstrated by P6 and her study buddy.

5.6.1.1. House mates & intuition

House mates were utilised by P1 and P3. P3 asked his flatmate for support.

> With regards to writing and editing ...one of my flat mates has been helping editing, although she is from a different department, ... (P3, Interview 3)

In his first semester, P1 sought advice from his housemate on studying.

> ...he suggested me to do things like if you have to write down something, first get, you know the brainstorming, get all the information from all the research papers

> and put them in separate area, and write from start, and think where you can put that information. (P1, interview 1)

However, P1 was most often guided by his intuition and what he thought was required without any consultation as demonstrated below:

> According to me, it is good, but because you are studying a lot of papers, after that if you are writing you may have something else in your mind. What I think is you start to write; you just start writing with your own words not with some kinds of quotations or reference. (P1, interview 1)

He does not seem to have clear guidance on how to complete the work, it appears to be more of an attempt to feel the way, as he admitted above, rather than using accepted guidance from a reliable source of information. He had nothing on which to rely from his perspective. He stated:

:

> I'm not that much confident, because I don't know if I'm writing the right thing or the wrong, but I don't know. There is no-one to evaluate my work here. I just write. (P1, interview 1)

5.6.1.2. University support

A few participants made use of the university systems to garner support. P5 was one of the only students who seemed to rely more on sources of available support than creating her own. She asked her tutors for help via email, and after lecture questions or a lecture session which was mainly for the purpose of asking questions. Unlike P1 & P3 she also asked her course mates for advice but tried to rely on her own thinking whilst also keeping in mind what her course mates had said. She also mentioned the helpfulness of the University Academic Language Skills (ALS) classes as the sessions provided feedback on the type of tasks and skills she needed on her course. These sessions are specifically targeted at international students and contextualised as far as possible to students' courses of study, to ensure they are not lost and unsupported. She commented on their helpfulness:

> It is helpful because it is, I have a lot of feedback on things I didn't know was a thing (P5, interview 2)

5.6.1.4. Technology and online support

Sources of technology also featured in some participants' arsenal of support. P4 thought that TED talks were helpful to support the work on one of her assignments. This was

because she was attempting to write an assignment on ‘technology entrepreneurship’ and was not sure about appropriate sources of information to support her work. She thought newspapers and what she called ‘talk shows’, meaning TED talks, were her best option.

> I didn’t see any research papers available, ...but so many news and articles, ... news that wasn’t written down and ...talk shows and everything where the businessman is there, they talk on the talk show, so it was from there. (P4, interview 2)

She discovered once she received some feedback that this was not what was required and began to try to use research papers, which she found difficult as she thought everybody said different things, which were hard to match together.

> It was like matching most of the research papers because everybody says differently and if I want to stick at one point only, I’ll get just one or two research papers if I want a combination... (P4 interview 2)

She was struggling as she was uncertain what was required.

P7’s classmates set up a WhatsApp group for her course to support each other with their work, but she did not find that particularly helpful. She thought it was only used by the group to complain and she admitted that she was the biggest complainer. This was also because she thought her level of work was inferior to them, and in her opinion her English was weaker. P8 also used a couple of WhatsApp groups, where his course mates helped each other with assignments. P8 was part of two groups, one was with people from his country and the other with people from his course.

> ...we have a WhatsApp group where we ask questions and get responses or advice, so yeah pretty much we help each other... I am part of two groups, one is with fellow … [people from his country] and the other one is with the lads in the class... we help each other. (P8, interview 2)

P8 had also sought help from YouTube to help with his lack of knowledge of quantitative methods.

> So, when you look at YouTube there was some really good content, helped you understand the concept easier, so I would constantly look at YouTube videos and make notes and try to understand them. (P8, interview 3)

5.6.2. Summary

The interview participants all developed or created their own support systems, many not taking advantage of specific support provided such as ALS. Some seemed to scramble for whatever they could find, others were choosier and more strategic, and some just needed a little reassurance that they were on the right track. This behaviour, in terms of creating their own sources of support shows that most were considering their needs, contemplating their potential strengths and weaknesses, and then seeking out who or what would be the best people or source of help that they could potentially benefit from engaging with. It presents a view of international PGT students as capable directors of their academic experience.

5.7. Group work and the opinions of others

Having to work with others was raised by some of the participants throughout their interviews, which is another emergent theme. Group work is used on many of the courses the participants study and is often assessed. Many of the interview participants found the experience of working in a group problematic at times during their courses. It led them to behave in ways that may not have necessarily been helpful to others in their groups, but behaviour that they thought was essential to keep them on their personal track. Central to this was the students' lack of knowledge about what groupwork entailed at the outset.

P1 was perturbed by a group work experience in his first semester. He thought he needed to be the lynchpin holding it all together and was irritated with his tutor for allocating him to that group. This may link to the lack of this type of activity experienced on his UG course.

> There was one group I have been put in, we were just two students coming from our group, representing our group, but the tasks were distributed to the whole group. How am I going to do the other tasks which were distributed to the whole group? How I'm going to do their tasks when I am not doing mine very well. I'm going to present them, and the assessment was about 30% for the group and no-one was with me to, it's like, we had to do peer teaching. I told you that I'm not use to that, I figure out a way to do that, I don't know if it is right or wrong. Just one mind thinking of how to do that, if there were four minds more, we may be could do better, but it was only me thinking about that and no-one really bothered because in the presentation I was the only one in front of the class. (P1, interview 1)

There was a sense of frustration evident, and he felt he had to carry the group, he felt responsible for the outcome. There was evidence of this behaviour by some of the other interview participants.

Like P1, P6 was the group lead for one of her group work assignments. It had been challenging due to the Covid pandemic with people in different countries as some had been required to leave and return home to their respective countries. However, she believed it went well and was expecting a good result.

> ...at the end of the group work we … did very well, excellently well. I was actually expecting it because of the amount of work we had put in to it (P6, interview 2)

She thought there was room for improvement despite the good mark for the group work. However, during the task, she had doubted the capability of some of the people in the group and decided that it would be best if she completed their tasks.

> I was not so sure that some of them would be able to deliver their own part of the work, so sometimes I had to take on some additional work that some other members of the group were supposed to do. (P6, interview 2)

P6 believed that part of the problem was her inability to delegate to the group, but the reason was more essentially that she lacked faith in some of the group's abilities.

> ...initially I thought I would delegate to them because of the time difference ... as well we couldn't communicate effectively with him and so I wasn't so sure he would be able to do the work he was supposed to do at that time, so I just had to do some of his work as well. (P6, interview 2)

P3 also had the same type of reaction to groupwork as some of the other participants. He relayed how he also tried to save some group work that was not working well. He also thought, like P1 and P6 that he needed to take responsibility to ensure the task was completed, although, he was not very satisfied with the outcome.

> ...we actually weren't really organised. Yeah, so it was a kind of thing that was multi-disciplinary, students from other courses as well like in the mix…, but we did try to structure it and we didn't get it really good, and towards the end I had to be the one throwing in like doing other people's parts. It didn't turn out too good. (P3, interview 2
>)

This perception of the need to take control was also experienced by P2 who was not very happy about his group work in the first semester. The group was allocated, and he had

no choice about who he worked with or any influence over how much effort they made. He found this disappointing as he had an aim to achieve over 70% for all his assignments.

> We did some group tasks in the first semester, not all of them were forthcoming like, at a point you just have to take responsibility since your scores are all tied together... (P2, interview 2)

He preferred the group work in semester 2 when he could choose who he worked with.

> This time around they allowed us to choose, probably that's why it's better. In the first semester the lecturer just used his discretion to put us in a group. (P2, interview 2)

Not all the participants felt the need to assume responsibility, in contrast, for P7, group work felt undermining. She thought she was the weakest.

> I don't like to work with a group because ...I felt always that my level is lower than the others, their level is higher than me... Maybe their English is better than mine, I don't know. But I just feel that my level is below them. They never say that to me - I know they would not say that (P7, interview 1)

In addition to issues with group work, one of the interview participants, P1, did not see the value in the opinions of his peers. Only the tutor seemed to be trusted to provide useful information, fellow students were seen as using time and not relevant. He was talking about the usefulness of asking questions in teaching sessions when he needed clarification.

> I told you like if I am not going to get straight answers from the tutor and everybody is going to make comments it is not worth it, I can ask them after that, it would save me time and him time as well, rather than other students jumping in my question and giving some lame answers. (P1, interview 3)

Rather than a shared learning experience, P1 was focussing on what he thought he needed and devalued the contribution of others, as he believed their answers to questions posed in sessions were of no significance and were in fact irritating. P1 had spent two years on a PGT course and his view of people time wasting as opposed to sharing knowledge seemed to increase.

5.7.1. Summary

Working in groups for assessment purposes was problematic for several participants. Some decided they needed to assume control to ensure the completion of the task. A

few participants thought the opinions of others were also not always welcome or seen as beneficial, which was expressed explicitly by some of the participants. This demonstrated elements of scepticism in the capabilities of their peers.

5.8. The impact of feedback

The participants reflected on the impact that feedback and grades made to how they felt. The interview participants were asked to reflect on the feedback they received. Some of the feedback was reported to have been surprising, both positively and negatively. Others discussed a lack of feedback, and most considered how they made use of what they received.

5.8.1.1. Surprising feedback

A few of the participants expressed surprise regarding some of the feedback they were given. At the time of her second interview, P5 had received some feedback for work completed. She had passed everything, despite thinking she might not, demonstrating a lack of confidence in her capabilities. She said she received high grades for her background knowledge of diseases but needed to improve her academic discussion.

> I am getting loads of grades for my background, we have to know diseases, how many have got it. I got very high grades on that, but when I discuss how exercise helps us, I am not able to discuss very well, apparently. (P5, Interview 2)

She was surprised by this, as on her UG programme she achieved a distinction and had expected this level of achievement on her PGT course. However, she was not disappointed by her grades, and said she was satisfied with them.

Like P5, P4 had been surprised by the feedback she had received at the time of her first interview. However, this related to her use of research papers and critical analysis, which she believed she had done well. Unfortunately, the feedback was contrary to her beliefs. She commented:

> ,,, I don’t know why I got less marks. I thought I had done really good research paper but I had done not including research papers very well in my project but I expressed my thoughts so that’s a big point... I didn’t still get it, what is critical analysis (P4, interview 1)

During P7's first interview, she said she had received some feedback for one of her pieces of work, which commented on the content rather than text style and proofreading, which was what she had expected. P7 was surprised that the content took precedent.

> ...I think that maybe he will include that my text needed proof-reading, but surprisingly, he didn't mention it, anything about my writing. He mentioned more about the content, maybe this is just to give feedback on the content. I don't know, maybe the purpose is to give feedback on the content, yeah. He gave more explanation which was clear...(P7, interview 1)

P7 did not seem very sure about what she should be receiving feedback on. However, by the second interview, P7 was very pleased with her work in the first semester. The main comment in the feedback given, was she needed to be more critical. She received a grade of 72 for one of her assignments. This was unexpected as she was still very doubtful about her capabilities.

> I get good grades, basically I got a first, 72, which I am very happy with, and unexpected, as how to say, when I was working, I was just feel like I couldn't do it and because it was very, very hard. I always doubt myself if I understand things while I'm doing it, but I was really surprised when I get a first, it keeps me going, putting in more effort... (P7, interview 2)

This result spurred her on with her work, or it would have done had the pandemic not hit. The interview was dominated by her concerns about the situation. She thought she would have proceeded well in the second semester if it had not been for Coronavirus. She received no further feedback during the course as she did not complete any further assignment tasks, although she did attempt her final dissertation.

5.8.1.2. The lack of personalised feedback.

In contrast to the above some students reported that they lacked feedback. By mid-point in the course P3 had not received any feedback for his work, apart from a grade. He did not know why, but he said he had not been expecting any. His grades for the work he completed were very high, a 95% and an 83%. These were both programming assignments, the written element for both comprised reports. He thought receiving feedback might have been useful for the written components of his assignments.

> ...I think it would be really good, especially for the sort of ones where we have to do writing, a lot of write ups, so it would be actually nice to get a bit of feedback... so it would be good to see where to correct and stuff, yeah, so that would be really good. (P3, interview 2)

Moving to P5, she remained unsure how to improve her level of discussion. She thought the feedback she had received did not provide any guidance to help her improve, and she had not sought anything further. However, P5 admitted that any feedback she received, was not retained, she stated:

> ... I read my feedback and it goes in one ear and out the other ear... (P5, interview 2)

She thought this might be attributed to her possible laziness.

> ... I could be just lazy, I don't know. (P5, interview 2)

Personalised feedback was missing for some participants. At the time of P5's final interview, the feedback she received was in the form of marked rubric sheets with pre-designated comments, reflecting the mark awarded which was ticked with an overall grade. She would have preferred some specific feedback, rather than pre-determined.

> ...I would benefit from more feedback, a bit more specific feedback, I think... I would like more feedback like what you did there was not so correct, but if you did it this way it would be more correct. (P5, interview 3)

5.8.1.3. Utilising feedback

The participants reflected on how they used feedback once received. Their uses of it were varied. Most of the participants used it to reflect on their work, and as guidance for how they could improve future assignments or improve exam answers. Some examples of this include P6 who ensured she made use of any feedback given.

> I used the feedback from the previous papers to do really well in the next assignments and show that I was doing the right thing that was actually required of me. I followed the guidelines and the order. (P6, interview 3)

Likewise, P8 reported that he received detailed feedback on his assignments, which he used to assist him with his next assignments.

> ...the feedback was really good, and I got a lower grade, and one thing I should say is the professor literally went line by line through the report and they gave me good feedback, so that really helped me for my next assignment. (P8, interview 2)

He believed feedback was key to his work:

> When you get the feedback, you get your grades and then you get like an abstract. I must say you get an abstract of what you've done overall, but as you read through your paper there are added comments on this thing could be done this way, and stuff like that, so yeah, those were really useful, I think. For me majorly, it was useful for the methods section and stuff, so that's where I lack my knowledge as well. The feedback was really useful. (P8, interview 3)

By the end of his course, P3 had received some feedback on his writing. This was sent via Blackboard (the Electronic Learning Platform) and during the exam period he had received individual recorded oral feedback and some personalised feedback via email. The focus of the feedback provided advice on what he could have done differently,

> ...so, the main thing about the feedbacks were actually with regards to the tasks that we were given, and then the outcomes, what we could have done right, and then that was it. (P3, interview 3)

He was able to use the feedback to feed into an exam for one module.

Another participant, P2, relayed how feedback had been key to an altered strategy which did not begin until the second semester following the results of the first semester and the feedback received.

> ...after the results of the first semester assessment when I got back most of my feedback, I know that okay, this is what is expected, this is what the lecturers want me to do, so when I saw the feedback, I know I had to go back to the drawing board and do things differently. (P2, interview 3)

Some of the feedback comments related to specific issues such as use of referencing and structuring. Consideration of P1's responses relayed he received useful comments on both these issues.

> There were not much references that support my argument or statement, that's the good feedback I got, and I improved that, another thing I got is the structure, it needs to be structured like this, you have written these things in this sequence, it can be suggestions as well. (P1, interview 3)

In relation to feedback on structure, P1 explained how it was helpful.

> He divided the feedback in 3 sections, in different sections, good bits, not good bits and improve bits. In good bits he wrote the good bits of the assignment, and not good, which were making a bad image on the presentation... if there were some spelling mistakes and replicated words as well, and improve, he just summarise the good and bad bits and says this can be improved. Even if it is a

> good bit, he will still tell you, it was good, but it still can be improved in this sense. It was that much help, because it is categorised. (P1, interview 3)

Further to P1, P8 also received feedback on the structure and content of his work, which he utilised in his dissertation. This led him to feel confident in what he produced.

> ...for my thesis I did implement those comments especially as it is a thematic analysis assignment, so a lot of the feedback my professor gave me there, I kind of made sure I didn't make the same mistakes for my thesis. So, I have used her comments to do a very decent job on my thesis. I mean that really helped, I must say. (P8, interview 3)

This was also the case for P6 who received feedback on the work completed by mid-point in her course, which she said focused on content.

> I should have explained more, or areas where I should have given much more details, I should have given fuller explanations in some areas. (P6, interview 2)

Her use of referencing had also received comments, like P1.

> ...for some other teachers it was about my referencing, yeah, I didn't do so well in referencing. (P6, interview 2).

In the final interview, the feedback she received commented on areas that she had not covered.

> The comments they made were about areas that I hadn't discussed extensively. There were areas that I needed to have discussed explicitly. I probably didn't really do a good job in doing that so some of the feedbacks was more about going the extra mile to discuss more... (P6, interview 3)

She was able to reflect and was capable of self-analysis in relation to her work having received feedback. This led her to review the work she produced in semester one and she recognised errors with her referencing.

> I actually went back to some of the papers written in my first semester, and I was going through my citation, and I was really surprised at what I actually did and none of them were so bad, just very little errors, probably I missed a comma, or I misplaced a comma. (P6, interview 3)

Occasionally, feedback was considered disappointing, inconsistent, and not useful, P1 reflected on this.

> we got feedback on all of the assignments, but there were just a couple of assignments which were helpful, not all of them. (P1, interview 3)

He gave an example of an unhelpful comment given by a tutor:

> He said that your topic is not interesting, just that feedback. (P1, interview 3)

There were also examples of inconsistency in feedback, mentioned by P1, in which he reported some tutors:

> ...gave a line, some of them didn't give feedback, it was just blank. (P1, interview 3)

P2 also reported an element of inconsistency in feedback and advice given. Almost a year after the receipt of a low mark, due to what he believed was over reliance on advice from one tutor, he was still unhappy about what happened, despite trying to be positive about the learning experience it provided. He tried not to allow that situation to be repeated.

> In my first semester because I was not use to the system, …lecturer give us a hint and said ... this is how you should do it,... finance people, we are more descriptive people, we analyse data, we use the charts..., so we got straight to the point,...our discussions are straight forward..., but I did it that way and the lecturer that graded my score was not a finance lecturer, so he said my report was too descriptive, it was less academic so it would fit more in a business setting than an academic setting, so I didn't do too well. But I took that feedback and subsequent reports that we had to do, and I thought what is expected of us is more of academic essays and reports to back everything up with references, support your argument with evidence, with that, I didn't have that situation again (P2, interview 3)

The feedback was also advisory on how to approach elements of PGT study. P2 was advised in the first year through feedback that it was important to review things critically. He also seemed to grasp what this meant, stating:

> I now know that you just need to think deeply. Don't just accept things. Don't just accept theories. Look at them for loopholes or any other theory. (P2, interview 3)

He also talked about the importance of making use of opportunities for receiving feedback.

> ...there is always a meeting with the lecturer, an interactive session. The assessment brief always has this one-on-one session with the lecturer that is optional. I think I didn't utilise more of it during my first year, when it comes to the

> second year, I did that, and it worked for me so if I continue and I try again, I will always utilise that opportunity to mix with the lecturers to get their own point on how to make the assessment better. (P2, interview 3)

Another use of feedback was a means of reassurance. This was reflected by P7. She was concerned at the start of her course about who would help her and provide her with feedback when she needed it. It was like a support blanket, so she could assess how she was performing and ease her anxiety. She considered who would provide feedback to help her.

> Sometimes a friend, or sometimes also I ask the lecturer if it is a short piece of work to give me feedback on how to improve my writing, so I still do that. (P7, interview 1)

5.8.2. The impact of grades

The grades the participants received were also a form of feedback and had an impact on the participants. They affected how the participants felt about themselves as demonstrated by the complete change in how P7 perceived herself when she received higher grades than expected, as seen above. However, the system and the terminology were unfamiliar to many of the interview participants until much later in their courses.

5.8.2.1. Grades not the main focus of study

For some, grades were not the most important aspect of their courses. P8 reflected on how the grade was not so important, it was the learning he was most interested in.

> ...I am not really looking at grades, I am looking at the learning perspective, so as long as I can remember whatever was taught, apply it in my job and going forward, apply it in research, that is what really matters, so I am banking more on the knowledge aspect than the scoring. (P8, interview 3)

Good grades had made him feel more confident in the past. Similarly (and as seen above) P4 said she was not concerned about her grades but was more interested in learning.

> I don't really consider grades as well as I'm learning. Learning is a better thing (P4, interview 1)

To some extent P1 was also not so focused on the final grade received. He was resigned to accepting whatever mark he received in his first interview, he commented:

> If I got lower grades then fine, my work is not up to their expectations. (P1, interview 1)

5.8.2.2. Grade dissatisfaction.

Some of the interviewees expressed dissatisfaction with their performance. P3 received high grades for his work as mentioned earlier. He thought that time taken on the work leads to higher grades. When asked if he had spent much time on the work that scored his lowest grade of 65%, he admitted he had not given it much time, thereby confirming his theory related to time invested. In the first semester he scored an overall 80%, but he was not satisfied stating:

> I think I learned I could have done better. (P3, interview 3)

He attributed this to laziness, which from the evidence of how he worked was probably not the case, but it was his perception of himself. The way he worked initially in wave one, demonstrated his desire to learn more than was required, he reflected in his final interview:

> ...in the first semester. I was rambling around and around in circles probably learning stuff I shouldn't really learn... (P3, interview 3)

He was however, pleased he would gain a distinction, having gained marks in the 70s and 80s for most of his assignments.

Another participant was dissatisfied due to not being able to progress due to lower than required grades at the time of her second interview, mid-way through her second semester. P6 was hoping to score higher for the Consultancy Project, which she had to do due to not being able to obtain a placement in industry. She wanted to continue with the consultancy instead of writing a dissertation, but she did not meet the required mark which would have allowed her to continue.

> ...for the consultancy project we are supposed to get 80% and above for the report, to be able to continue the consultancy report for the next semester, but our group scored 70, so we couldn’t continue... (P6, interview 3)

She had scored very well on her work overall, despite the disappointment above she was brimming with enthusiasm.

> I did really well. I did very good. My grades were excellent, I was actually very happy, so I felt very proud of myself... (P6, interview 2)

> ...I have gotten a whole load of 70s. I had some 80s as well. I had more 70s, some 80s and I had one 58 (P6, interview 3)

However, she was not satisfied with all her grades at the end of the course. She was unhappy with the 58%. She thought she could do much better.

> ...I didn't think I had prepared adequately for it. I didn't really do a good job on that assignment... I actually could have done a lot more, it was actually still not an excuse. It was just a lot of things were going on at that time, yeah, it was also during the lockdown and pandemic. (P6, interview 3)

In the end, P6 reflected on how the grades she received showed how she improved over her PGT course.

> I can see how my scores have improved from my first semester to my second semester. Yeah. And even the feedback I have gotten from the papers I have written actually, they all indicate there is an actually significant improvement in my academic skills (P6, interview 3)

In a similar way to P6, P7 also found her grades were a source of frustration. She was often frustrated when she worked hard and received a low grade. At the start of her course, she thought she would be happy with the grades she received.

> I said it is always surprising that when I worked for example, really hard on essays and I get really lower mark which is kind of frustrating, but I'm still aiming for high. I mean, I will not be sad if I get in the 50s or 60s, I will not be sad because I know I worked hard on this, and this mark, if I deserve this mark is okay. (P7, interview 1)

The covid pandemic, as mentioned above, curtailed her quest for additional and better grades. She was also aiming to maintain her newly discovered ability to gain high grades, but as seemed characteristic of P7, she had her doubts, mainly due to stress and a personal issue she was dealing with. In her second semester, she was unable to complete the assignments. Nonetheless, her semester one grades had given her confidence and it had changed her perspective on herself.

The grades received induced reflections on progress which was also the case for P5. She, however, was hoping to achieve high grades, although she was doubtful this would happen. The grades she received ranged from 50% to 77%. Therefore, she wanted 52% for her dissertation to get a merit. The highest grade of 77% was for her website design. The lowest for statistics, a module she had been struggling with.

> I got 77 on my website, which I was not confident about at all because it was a topic that I had never done before...unlike the statistics, I got the lowest mark. (P5, interview 3)

5.8.2.3. Lack of grade terminology

A few of the participants by the end of their courses were still unfamiliar with how to discuss their grades. P2 equated his grades to his country's system, rather than percentages, calling them 'As' and 'Bs'. When asked whether his work had received grades not percentages, percentages had been awarded but he still thought in the old system he was used to, he explained,

> It was percentages, we always know 70 and above is what we call "A" in my country. (P2, interview 3)

His final overall mark was in his terms an A, which is what he had been aiming for from the beginning, over 70%. He said he scored an 88% and for some other work over 90%, which was a very high mark. This was for a reflective statement. For his dissertation he had not quite made his self-determined target of 70% and scored 67%. He said he had faced some challenges which left him short of time.

> I had some challenges that made me not sure I had enough time to do it. I knew I would have done it better if I know what to do, but I was constrained with time, so with the deadline. So overall, the grades were better. The grades were better than the first year. (P2, interview 3)

When told that gaining 72% overall was a distinction, he was still unsure what that meant, commenting:

> I hope that is how they grade it here. I don't find time to compare the UK grading system. You can't get above a distinction, right? (P2, interview 3)

P8 was also unfamiliar with the PGT mark terminology. He was hoping for a 2:1 for his final mark, demonstrating that he was unaware of how PGT grades were named. He had a mark of fifty-nine and was hoping that his dissertation would push him up to commendation level.

> ...overall, right now I am at 59, so I am banking on my thesis to get a 2:1. I am hoping for that so yeah. (P8, interview 3)

5.8.3. Summary

Emerging from the data in relation to feedback and grades, were different thoughts and responses. Feedback was considered by different participants a mix of surprising, helpful, and not very useful depending on what was received. It was utilised in different ways as

guidance, reassurance, the spark for a change in strategy, and inspiration for reflection and self-analysis. In relation to grades, some participants said they were more interested in learning rather than the mark they received, others were disappointed with their results, while others did not really understand the PGT marking terminology. It is clear however, that feedback and grades can have an immense effect on individuals, and they are powerful tools in academia.

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5.9. Confidence

In addition to the participants' perceptions of their level of knowledge and perceived ability, the participants' levels of confidence were considered as part of the study as it appears to have a bearing on how people feel and perceive themselves and their academic self. The participants' level of confidence, as seen above, was affected by various aspects of both their previous study experiences and their experiences of studying on a PGT programme. Levels of confidence were tracked in all three interviews and were also considered in the SDQs in Section 5 of SDQ1, and Section 3 of SDQ2 and SDQ3.

5.9.1. Overview of changes in confidence in academic activities

The tables below (5.2a to 5.2i) show how the participants changed their choices of how good they thought they were at the twenty-seven listed academic activities over the three waves of research. These results are the overview. It is possible to see shifts up and down in their results, which may denote loss or gains in confidence.

Table 5. 2a - 5.2i: Interview participants' changes in levels of confidence throughout their duration of study.

P1	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**
Very good	0	0	0
Good	6	12	10
Okay	13	12	14
Not sure how to do it	3	3	1
No idea	4	0	2

P2	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**
Very good	23	9	10
Good	4	18	17
Okay	0	0	0
Not sure how to do it	0	0	0
No idea	0	0	0

what to do			
No idea what it means	0	0	0

5.2a: Overview of P1's capability responses

what to do			
No idea what it means	0	0	0

5.2b: Overview of P2's capability responses

P1 (Table 5.2a) demonstrates some uncertainty with some *not sures* and *no idea what to do* included in his choices. The *no idea what to do* choices disappeared midway through the course but a couple returned at the end. The data shows evidence that he gained some confidence in his academic activities over the duration of his course, although, there was evidence of slight decline compared to midway through his course by the time he had completed everything. These results are reflected in his interview discussions.

P2 (Table 5.2b) began confidently. He thought he was capable of all skills, some more than others. This confidence diminished by the second wave and remained the same overall by the end of his course. It provides evidence of a drop in his initial confidence when comparing the changes in *goods* and *very goods* over time.

P3	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**
Very good	15	9	11
Good	8	13	12
Okay	4	5	4
Not sure how to do it	0	0	0
No idea what to do	0	0	0
No idea what it means	0	0	0

5.2c: Overview of P3's capability responses

P4	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**
Very good	21	0	0
Good	3	12	17
Okay	3	14	9
Not sure how to do it	0	1	1
No idea what to do	0	0	0
No idea what it means	0	0	0

5.3d: Overview of P4's capability responses

P3's (Table 5.2c) results, suggest that he was slightly more confident with more *very goods* than *goods* at the start of the course. He was less sure midway through the course, which remained more or less the same until he finished. P4 (Table 5d) shows a similar pattern of data, with a strong start and a less sure finish, although, there was a slight rise in confidence from wave 2 to wave 3.

P5	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**
Very good	3	0	0
Good	0	8	2
Okay	11	12	14
Not sure how to do it	10	6	9
No idea what to do	3	1	0
No idea what it means	0	0	0

5.2e: Overview of P5's capability responses

P6	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**
Very good	10	14	27
Good	17	12	0
Okay	0	1	0
Not sure how to do it	0	0	0
No idea what to do	0	0	0
No idea what it means	0	0	0

5.2f: Overview of P6's capability responses

P5's (Table 5.2e) responses were varied with a few *very goods* but many uncertainties. This uncertainty lessened at midpoint but then increased at the end of her course. There is nothing from midpoint she thought she was *very good* at. P6's (Table 5.2f) results show her increase in her perception in her levels of confidence with a slight dip in the number of selections of *good* mid- course. She had a high level of confidence by the end of her studies.

P7	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**

P8	**Academic activities I am good at**		
	Wave 1	**Wave 2**	**Wave 3**

Very good	0	1	3
Good	12	20	21
Okay	14	4	3
Not sure how to do it	0	0	0
No idea what to do	0	0	0
No idea what it means	1	2	0

5.2h: Overview of P7's capability responses

Very good	0	2	7
Good	23	7	20
Okay	4	15	0
Not sure how to do it	0	2	0
No idea what to do	0	1	0
No idea what it means	0	0	0

5.2i: Overview of P8's capability responses

P7's (Table 5.2h) perception of herself shows an increase in belief in her capabilities over the three waves, and some uncertainty in waves 1 and 2, for certain academic activities. P8 (Table 5.2i) seems slightly more unsure at midpoint than at the beginning and the end, where he seemed to have a higher level of confidence.

Levels of confidence appear to match the movement of data in relation to perceived levels of knowledge and ability in most instances as seen above. The interview data provides insight into these choices and the potential rationale for the levels of confidence expressed.

5.9.2. Changes in levels of confidence: interview data

The interview participants' levels of confidence altered for different reasons during their courses. There are two identifiable directions of travel for their changes in levels of confidence, consisting of those who started with a low level of confidence, which increased over time, and the opposite, those who started with a higher level of confidence in comparison to others, that declined.

5.9.2.1 Low to high confidence

At the start of his course P1 was not confident in his knowledge and understanding of academic activities, which was seen above. Mid-course he was feeling much more confident than at the time of his first interview. This was due to receiving good grades for

his work for the first semester, and he also felt his English language ability had improved over the summer break due to a part-time job. He stated:

> I am very much confident because I have done some part time work as well that has given me much more confidence. If you listen to my previous interview and compare it with this one, you will feel a difference with my accent, my English, my fluency, and my confidence level in my answering (P1, interview 2)

At the end of the course, he said he was 85% confident with the missing 15% due to him being unsure about his final grades. This was not reflected in his section 3 questionnaire results as seen above in Chart 27a relating to overall changes in his level of confidence.

P2's confidence rose over time. He was considering his grades in the first interview, it formed most of his reasoning for his level of confidence. At that time, he claimed it was at 70%.

> Well for now, the results are not yet out but just say 70%, I'd give myself 70%, I don't want to underrate the system, I want to do more, … I've not had any results yet, so I want to do so much, do the best of my abilities, so that when the results come, because it is always good to aim so high, if you don't get it at least you will not be too far away from the target. (P2, interview 1)

By interview 2, he was still feeling about 70% confident, which was mainly because he was concerned about finding an internship. He had not yet secured one, but this was not connected to his academic activities; it was an additional factor, although still course related. It was also distracting him from his focus on the course.

> Probably when I am done with the internship securely placed, I will be more focussed. I am not completely focussed this semester. (P2, interview 2)

By the end of his course, P2 was feeling confident in his academic capabilities:

> I think I am more confident now about my academic skills than I was when I came, so the confidence level is higher...I thought, how will I be able to go about this project, dissertation writing and all that, but I have an idea of what is expected, so my confidence has improved tremendously. (P2, interview 3)

The confidence level of P2 was higher at the end of the course than at the beginning. The increase in confidence was no longer attributed to a percentage and was due to knowing how everything worked and where he belonged in that process. This contradicts

the SDQ data slightly (see Section 5.9.1. above) where it looked as though his level of confidence dropped a little. He said:

> I think I am more confident now compared to when I started the course, because now I think I know what is expected. ... I know how to source, like initially when I came, I was thinking how will I get materials, where will I get all these journals ... We had a library session, although we asked at the orientation programme, there everything was so fast, then I was thinking when I needed to get those journals, and I was stranded, and I learned to just navigate, so I called a friend and asked how. I think I am more confident now. I know how to approach my assignments and I know where to get the materials I need, that alone gives you a lot of confidence, to get the materials, you need to do what you need to do. (P2, interview 3)

Like P2 in terms of her level of confidence near the start of her course, P5 did not feel confident,

> ...I'm not too confident. I would say no…. I think in every task I do; I have to have someone read through it or hear me out to just confirm that it is alright (P5, Interview 1).

Asked what would help her to feel more confident, she was not sure. However, times she said she had felt confident were on her UG course, when she knew the systems and the tutors:

> In my UG I was comfortable and more confident in my last year. I knew the teachers, stuff like that. Now it is more, everything is new, so I don't actually know what I'm doing, kind of, so I haven't had no feedback from the teachers on my work like that yet, so I just have to wait and see, I think. (P5, interview 1)

In her second interview, P5 was feeling mostly confident with what she needed to do, although, she was doubtful about one piece of work, which was changed due to the Covid pandemic from a practical exam to something that was not yet determined at that point. The lack of knowing was not helping her level of confidence. In the final interview, P5 said she was confident, apart from the topic of statistics. She felt more confident at avoiding plagiarism and with her writing in general.

Like those above, P6 began her course with a distinct lack of confidence.

> I would say that I don't think I am so confident anymore (P6, interview 1)

As mentioned above, it had been seven years since she had last studied on her UG course, which was also a factor in how confident she was feeling. She had also discovered that her PGT course was more about the application of knowledge and not written exams.

> ...it is about application, so with that it has boosted my confidence level as I feel this is something I can do. (P6, interview 1)

She thought she benefitted from practical learning.

> ...it's not just a test, … and I notice that I learn better when I have to practice things. (P6, interview 1)

Therefore, her level of confidence came from being able to apply knowledge.

> ...my confidence comes from the fact that I can actually apply the knowledge that I've learned. (P6, interview 1)

In the second interview, her level of confidence had grown immensely. On a scale of one to ten, P6 said she was a ten in terms of her confidence. This was mainly attributed to the feedback she had received.

> I'm a 10 because, I believe – initially I would say at the beginning of my course, I wasn't that confident, I was scared, I wasn't so sure if I would be able to do it, I wasn't so sure if I was being very optimistic. Whilst in my first semester and even after this semester so far, the feedback I've received and so far, even my assessment from last semester my results boosted my confidence, yeah, it has helped boost my confidence, so I can achieve, I can actually do. (P6, interview 2)

This level of confidence continued and was still high at the end of her course, so much so, she wanted to continue studying.

> I am getting used to school, getting used to writing actually academic writing, it was a bit challenging to me but right now my confidence level is high. I actually feel very confident. I could take another academic course and do really well in it (P6, interview 3)

It seems that her confidence stemmed from validation of her good work via feedback and grades, which instilled a sense of self-belief. As has been seen above, this was not the same for some of the other participants.

Another participant to increase in confidence over time was P7 who was like P6 initially in doubting her capabilities. She thought her level of confidence at the time of her first

interview was a six out of ten. Once she had settled down and received her grades for semester one, her view of the whole course changed and her level of confidence.

> ...when I got my first semester result, that really gave me more confidence and really changed my view about the whole course, because to be honest my results comparing with bachelor, increased, which is really a big surprise for me. I said, “oh my God, so I can do it”. So, it is really the results in the first semester really changed my view (P7, interview 3)

Overall, her confidence was high at the end of the course due to the unexpected success she had with her work.

> I am very confident yes. When I submitted my dissertation, my confidence increased and as I said at the beginning it gives me a sense of pride that I can do the hard work with limited resources. (P7, interview 3)

Finally, P8 was not feeling very confident at the start of the course, mainly as he thought he lacked research experience, it was making him feel anxious.

> ...it was difficult because I've never done a proper research like this before, so I was a little anxious (P8, interview 1)

He thought his confidence would increase once he had completed his first assignment and by checking with his course mates on their progress. However, he said he preferred to work alone. In the second interview, as he predicted, he was feeling more confident having received some feedback to confirm he was working as required.

> I am very confident, I am not very confident with quant [quantitative methods] but with all the other subjects yes, I am confident (P8, interview 2)

Asked where the confidence came from, he described how in the past it had come from good grades, but the type of assignments he had to complete on his PGT course made him feel like he was learning and absorbing information, which contributed to his increased level of confidence, as opposed to exams where the information is retained for the exam but quickly forgotten once the exam has ended. He thought this was not the case with written assignments.

> ...the good thing about the assignment type assessment is you actually put in a lot of effort to read and study, and in an exam for the sake of the examiners, do and then forget it, but as soon as we are doing assignments and we are reading a lot, it sticks to your mind, it sticks in the head... (P8, interview 2)

At the end of his course, P8 thought he had grown in confidence since he started a year ago. He was considering applying for a PhD. He felt inspired.

> ...Now I have a totally different idea about research and academics and stuff...things have changed, things have inspired me to go more into research and academia and so for now the thought is there, which was never there a year back. The course has influenced me. (P8, interview 3)

This represents a complete change of perspective for P8 in his capabilities.

5.9.2.2. Loss of confidence over time

There was evidence of a decline in confidence for a couple of the participants in the interview data. P3 was confident with his approach to his studies and came across as a confident person which he said was a façade. He admitted he lacked confidence in social settings and public speaking, although, if it was for a defined purpose, he thought he was fine,

> ...if it comes to something like public speaking, if I have to do without any reason to do them, confidence is zero, but if I have to do it for a purpose like I have something to achieve by doing it, then it's like - get up and do it. (P3, interview 1)

At mid-point in his course his level of confidence had declined as he was learning new topics outside of what he had learned on his UG course. He thought:

> I'm probably not as confident as I was last semester because that was the bit about programming, I love programming. It is a good domain for me, but I'm here and I'm just reading a bit more so I am building up confidence, yes, so it's at the moment probably 60%. (P3, interview 2)

To increase his level of confidence, he thought more reading would be necessary as that was where he said he gained his confidence.

At the end of his course, P3 was still not confident about his ability with the academic activities, despite receiving very high grades for his work. The grades seemed to be of little significance to his sense of self-belief. P3 received very high scores for most of his work. The revelation that this did not equate to a high level of confidence in his capabilities, indicates that his perception of self was not related to grades.

Meanwhile, P4's loss of confidence was related to her lack of an internship. In her first interview, P4 said she was feeling 80% confident. She said she lost confidence when she

did not complete what she had set herself to complete, and she got frustrated about it. She talked about setting her mind to focus on her work.

> Like normally I start from I am not confident, I want to make my mind set before firstly, because, if my mind is not roaming here and there…. I won't be confident for some work. (P4, interview 1)

By the time of her second interview, P4 was not feeling very confident because like P2, she had not managed to secure an internship, an integral part of her course. She seemed to be feeling slightly demoralised as other students were being given opportunities. She never got her internship.

5.9.3. Summary

The data shows that most of the participants grew in confidence over the duration and by the end of their courses. The participants' levels of confidence for most stemmed from a mix of the following, the grades and the feedback they received, a realisation that they had the ability and the knowledge to complete the work, and the opportunity to apply knowledge rather than having to remember information for exams was also commented upon. However, this was not the case for all, for the two participants who saw a decline in their confidence, the reasons given were lack of knowing what was required, learning new topics outside the scope of previous experience and external contributing factors such as not being able to secure an internship.

5.10. Negative self-perception.

Negative self-perception relates to the participants' perceptions of not being able to do certain things, a sense of self-doubt, it could also be termed 'a lack of confidence'. Some of the participants described negative feelings related to their experiences of studying. These included having to step out of comfort zones, feeling stupid, being fearful and 'lost', demonstrating negative self-perception. These experiences will be presented below.

5.10.1.1. Comfort zones

Some of the interview participants talked about their sense of stepping out of comfort zones and how this felt. P5 felt the impact of this as she had, what she described as a cocooned UG experience and previous bad experiences at school.

> I had to go out of my comfort zone, especially oral presentations because I hate them! (P5, interview 1)

This hatred stemmed from her previous experiences presenting in school:

> I was so nervous, I was actually at my high school…I actually fainted because I was so nervous for the presentation (P5, interview 1)

She thought this was due to stress. She managed to complete the presentations on her UG course due to the comfortable environment and supportive atmosphere.

> It was mostly because I felt comfortable in my environment where we had a really small class like twelve people, so I really knew the people and the teacher, and I felt more comfortable in the group (P5, interview 1)

P7, like P5 also felt out of her comfort zone for similar reasons. Her UG experience provided much more support and cushioning. She realised she had left her comfort zone of her UG course, but the new experience had helped to boost her confidence.

> Now I come out of my comfort zone, and I see how it is changing and I overcome that, so it has boosted my confidence... (P7, interview 3)

P3 was also outside his comfort zone in his second semester. He did not think he was as confident as he was in his first semester as he was learning new topics, outside of what he had learned on his UG course. He thought:

> Well, this is actually a bit new, like I did say electronics isn't really my strong suit, it is not, but most of the courses we are doing is electronics... I'm probably not as confident as I was last semester because that was the bit about programming... (P3, interview 2)

5.10.1.2. Not needing to feel stupid.

Some of the participants were concerned about how they appeared to others. This led them to behave in unhelpful ways which affected mainly themselves. One example was reticence to ask questions for fear of looking foolish. P1 spoke about this in his final interview when asked to reflect on the advice he would give to new students about to begin studying.

> ... I will just say to them don't hesitate to ask. It is not going to matter if your question is going to be not relevant, if it is sounded stupid to you it is not compulsory if it sounds stupid to the other person who is the listener, no one is going to say that your question is stupid, they are going to say it is not relevant, they will still give you an answer in a way that you don't mind. I've seen that, but I hesitated a lot, I hesitated a lot, I didn't ask questions much in the start, but after

> that I started asking questions and I got to know that okay this thing is not going to matter. (P1, interview 3)

Loss of face and appearing to be stupid seemed to haunt some students. They may rather not speak up and ask for help because of how it might make them appear to other people.

P2 had similar anxieties. He discovered that it was acceptable to ask questions for which he would not be ridiculed, which suggests he may have been in the past. He stated:

> ...the way they lecture, they are kind of open, so they don't see any argument as stupid. Any suggestion you give or any answer you give is correct as long as you can defend it. (P2, interview 1)

In contrast to the previous two participants, who were concerned about how they appeared to others or judged for asking questions, a third interview participant raised the sense of feeling stupid due to a statistics module she found difficult to comprehend. It was not something she had done before. She commented:

> I felt so stupid doing that module... Everything, like how you do it, how you should know what to do, when you see what kinds of assignments you are doing and stuff... (P5, interview 3)

5.10.1.3. Sense of fear

A sense of fear was also evident in the findings for a couple of the participants. This was related to their capability to complete some of the academic activities required. For P2 this was in relation to completing a dissertation.

> ...that fear that was always there, would I be able to do my dissertation to write 15,000 words looked as if it was just too much, now if I have to undertake it, I'd maybe do a PhD, the fear would not be as it was when I just started the course, because when I started the course, I thought how will I be able to go about this project, dissertation writing and all that ...(P2, interview 3)

P6 expressed a sense of fear in her writing abilities in her first interview. She was feeling fearful of it as she thought it had to be good.

> Writing for me right now is…really not something I love doing...maybe it is because I have to do a lot of writing that I am beginning to get a bit scared about it. (P6, interview 1)

She was also concerned about her lack of memory skills and her general study capabilities due to being out of education for some time.

> I think it is because, although initially when I was about to start school, I had this fear about writing exams and stuff ..., I already felt I'm getting too forgetful, how I am going to cope with writing exams again. (P6, interview 1)

5.10.1.4. Sense of being lost.

In addition to feelings of fear, two participants relayed how they felt lost. P7 was the participant who felt most lost at the time of her first interview, mainly due to not having the support of a single tutor to rely on for advice.

> I felt the main support was my supervisor on my UG. Now I am kind of I feel lost, maybe because two things, the subject is different, and also read, I read just to make sure I understand. I always doubted myself, I understand things right even when I read lots of articles, I go back to ask myself do I understand the subject, and to be honest there is no one person to just keep checking your work...(P7, interview 1)

P1 also seemed to have a sense of being lost. As seen above, it was as though he was stumbling along and seeing what worked based on some homegrown advice. This affected his level of confidence.

> I'm not that much confident even now because I don't know how it works here. (P1, interview 1)

5.10.2. Summary

A small number, just over half of the interview participants provided explicit evidence of concerns about various aspects of their PGT study experiences. This constituted negative self-perception including feeling lost, a sense of unnecessarily feeling stupid and fear having moved away from their comfort zones of their previous study experiences. This does not necessarily mean that other participants did not also feel some of these things at points in their courses, they may have chosen to not mention them.

5.11. Success and achievement.

The notion of success was explored with the interview participants in interview one. The participant ideas of success were interestingly varied. Their aims for completing the course were also examined. These are discussed below.

5.11.1.1. Success as satisfaction and contentment

Three of the participants saw success as a form of satisfaction or a type of contentment. P1 connected success to satisfaction:

> Success means, for me, is kind of satisfaction. If you are satisfied with things, it is success. If you are not satisfied, it is not success. It is like you have accomplished something, but it is not what you desire for. If you desire of something like I have been thinking of getting my own company and also think that I want a job. The job is just an accomplishment, not a success for me. If I get a company that is success. I feel like, satisfaction in me. Like I am satisfied with what I've achieved. I am satisfied with my achievement and accomplishment - that is success. (P1, interview 1)

Meanwhile, P3 had a different idea and did not want his definition of success to be related to competitiveness. He stated:

> Success in the long term, I think, it will mean a house on a beach maybe...I think it is just a quiet life, yeah, not anything fancy, just having something doing, settled and just living one day at a time. That's as much as success gets for me, yeah. (P3, interview 1)

Finally, P8's definition of success was to feel happy and contented like P3. It was not for material gain or an ambition to be anything, as described below.

> Success for me means if you're happy, basically content with what you have and every night when you go to bed if you have nothing to worry about that is success to me, if you are just happy and content with what you have... (P8, interview 1)

5.11.1.2. Success as achievement of goals

Another three of the participants equated success with the achievement of their self-set goals which was also for P2 about maximising his potential. It was not specifically about passing the course with the highest grades but achieving his aims. He said:

> ...success is generally my maximising potential, being the best that I can be, which is for me everything I desire to accomplish. To be able to accomplish that every dream I've had, to get that fulfilled ... (P2, interview 1)

P2 had set out with a clear goal and seemed determined to accomplish what he had embarked upon. This was the same type of reasoning given by both P5 and P6. Success for P5 was about achieving self-set goals. She gave the example of passing a class. This idea of success had changed from it being an attempt to get the best grades.

> I was more strict if I can say so previously. I was like if I don't get the best grade, it's not good enough. Now I'm more relaxed towards it I think, a little bit. (P5, interview 1)

She was putting much pressure on herself, which appears to have been self-determined. The reason why this had changed was the realisation that:

> ...it's not possible to be having 'A' in everything you do... (P5, interview 1)

P6 also thought success was achieving self-set targets and measuring them with self-determined standards. She did not think it was about comparing herself to others.

> ...to me success is being able to set targets for myself and being able to achieve them based on whatever standard I've set to measure it against. To me that is success. It is not necessarily about comparing myself to others... (P6, interview 1)

When asked how she decided the targets she was aiming for, it was a combination of two things that she used.

> ...I would say, it's like measuring my present state, and where I hope to be in the future, and I think that difference would be the target I set. (P6, interview 1).

5.11.1.3. Success as a source of fame and thoughts of failure.

The final two participants viewed success slightly differently to the others and each other. P4's vision of success, was connected to recognition and fame. In her first interview she aspired to become an astronaut.

> Successful means as my think, is like to get good fame in the people (P4, interview 1)

For her it did not consist of any other considerations apart from being well known for doing something good. Whereas, P7 had not thought about success before and had to think what it meant to her. She did not have a ready, easily accessible response. After some thought, success for her was passing the PGT course the best she could.

> Like I want to put all my effort in this course, because success is meaning I achieved this course for me now. (P7, interview 1)

She was the only participant to discuss the potential for failure in relation to success.

> I don't know what I will do but I think that fail is not the end of the world, maybe if I failed for now because I don't know what the expectation is for this course yet, but it can be one failure is for everyone, failure is for everyone. I might fail at some point, but I might take time to process that I have failed, and I need to re-do it or repeat it, but it is to just get up again... (P7, interview 1)

Success meant different things to the participants from a form of satisfaction to a sense of contentment and happiness, fame and achieving self-set goals. Only one person linked the idea of success with potential failure, which was not mentioned by any of the other participants.

5.11.2. Aims for completing the course.

This question was asked to investigate what the participants were aiming for once their course had ended. This may reveal more about their self-perceptions and their ASC.

5.11.2.1. High grades and career aspirations

Most of the participants were aiming to gain the highest grades they could achieve. Most also had career aspirations. P1 chose to study construction with the aim of gaining employment in the field and to possibly start his own business in his country. In terms of his PGT course, he stated:

> I want to do my best, but the first thing is to pass each and every course. If I feel like the course is my major interest, I like to achieve the highest grade in that. (P1, interview 1)

He chose the course based on the hope it would provide additional knowledge of construction not currently available in his country.

> ... there is new technology that it introduces that I don't think so is in [his own country]. I haven't heard from anybody in [his country] about the BIM, Building

> Information Modelling. It's an initiative in the UK and it's been deployed all over the world. It should be in [his country]. (P1, interview 1)

P2 wanted to find a way to balance a career with working in academia in some way, possibly studying for a PhD. He had some experience of teaching on his UG course and enjoyed it. He wondered about doing more.

> I loved teaching on my UG course. I used to do a lot of tutorials for my course mates and some PGT students ... now the focus is my master's, but I might push for further studies, a PhD, really because I love lecturing, I love it, so I might do a PhD or no I might do both. My dream for myself is to have a good balance between academics and industry. I still want to be relevant in both fields, not just the idea to bring advance in industry, and also in academic. (P2, interview 1)

He was also keen to gain a distinction. By the time of the second interview his aims had not changed. At the end of the course, he was still considering starting a PhD but was searching for jobs.

> For me I have started looking for jobs, so my options are still open. I might choose to go for further studies, maybe a PhD. My mind is not wired for that yet, but I'm thinking of working so I have started looking for career jobs in the UK and I hope to get one. (P2, interview 3)

P5 was also initially aiming to undertake a PhD and was therefore aiming to gain the highest grades, although she had an element of self-doubt.

> I'm not sure if I can make it all the way to the top but I will try at least. (P5, interview 1).

If she did not achieve her goal of a PhD, she said she would work in the field she was training in. However, by the second interview there was a change and a lowering of ambition. She was aiming to pass. She stated:

> ...mainly passing, but I want, my goal is to pass, but if I get a merit or distinction, it is a plus. (P5, interview 2)

She was also contemplating working with differently abled people after she finished the course.

> I was thinking about going home and learning sign language. I would be able to help people also with hearing impairment and difficulty talking. (P5, interview 2)

This is a change from her previous ambition. The reason for no longer wanting to pursue a PhD was a drop of the initial enthusiasm she had at the start of the course, stating:

> ...I am a little bit fed up with university now... I'm not unhappy, if you know what I mean, but I just want to do something different now. (P5, interview 2)

After she finished her course, in her final interview, she was looking for a course to learn sign language so she could work with people with hearing impairments as she stated she would in interview 2.

Attaining a better job was the aim of P8. In his first interview P8 would have been happy with a high grade, but his aim was to learn to improve his job prospects.

> I would be happy with the highest mark, but normally my aim is to learn from the subject really well, and use it for getting a better job, using what I have learned in the working placement... (P8, interview 1)

This was still the case at the time of the second interview. He prized learning over grades.

> Obviously to get the best grades, but to get the best knowledge from the subject. I'm not really worried about the grades, but for me it is getting the knowledge from the subject, getting information, that's the key, and probably in the end I want to land in a good job. Of course, if you get the right knowledge, you would get the right grades, but I am more focussing on the knowledge than the grades for now. (P8, interview 2)

Acquisition of knowledge was more important than grades. He went on to confirm his thinking.

> ...with a subject like this when you get into the workforce, the grades don't matter, it is how you use the knowledge that matters, so I think it is important to understand what you are learning and getting the right knowledge as well, with that you can definitely do well in your work place, your job, so yeah, that is one thing I want to do, applying whatever I have studied. (P8, interview 2).

In a slight contrast to the others, P3 wanted to be useful and knowledgeable as his aim for completing the course. He said:

> I just want to be useful. I guess, because it's just, it's just knowing and knowing, I like to tell myself that I want to be cosmopolitan, something like this. Know a ton of stuff, like everyone can say something, and I can say I have got an idea about this, yeah... I won't say I'm 100% ambitious. (P3, Interview 1)

In the second interview he was also contemplating moving into research as he was interested in discovering more. He liked learning for the sake of learning which was not

due to any specific aim. After the end of the course, he was applying for PhDs and working as an IT support worker, making himself useful.

5.11.3. Summary

Success according to the participants, covers a range of ideas, which included accomplishing aims, satisfaction, a quiet life, fame and recognition, and contentment. There was not an agreed definition, which is potentially not such a surprise as success is a very personal consideration and may not necessarily relate to their PGT courses. These definitions show that the participants have their own notions of success which are not necessarily linked by all to their academic work. Asking more specifically their aims for completing the course, gaining a high mark was the main aim of most of the participants but not all. Some of the participants wanted to learn to improve their knowledge, or to improve their prospects for the future, a high mark was a bonus but not the end goal. Some aims changed based on how well they were performing. Some increased their level of ambition, others reduced theirs. Other PGT students may have their own varying definitions of success, which have been shown in this research to be very individualistic.

5.12. Chapter summary

This chapter has presented the data and the emergent themes related specifically to the interview participants. Various issues have emerged including the participants' perceptions of the differences between UG and PGT level study, which amplified the findings from the self-descriptive questionnaires in relation to unfamiliarity with some of the academic activities required at PGT level. This was particularly related to writing activities, knowledge of which varied depending on the educational system where they were taught and assessed on their UG courses. The participants were found to be strategic in their approach to their PGT studies. They created support structures, gathering people or technology they thought would be most advantageous in helping them personally. However, the data showed evidence that working with others was problematic for some. Feedback and grades received were shown to have the potential for great influence on the participants' self-perception. It had the power to alter their trajectories of how they felt about their capabilities and could change behaviour in approach to their studies. They also had an impact on levels of confidence. Some of the participants also expressed some negative perception of themselves, with different feelings including fear, stupidity and of being lost. Different definitions of success were

expressed, some of which were linked to the variety of aims the participants had for completing their courses. Overall, they overcame many personal obstacles and hurdles to successfully complete their courses while also demonstrating their changing perceptions of themselves. The next chapter will consider how these findings link with Academic Self-concept and the literature in chapter two.

Chapter 6: Discussion Chapter

6.1. Chapter introduction

The aim of the chapter is to consider the findings, using the lens of the previous iterations of ASC research to view the international PGT participants' experiences of studying on their PGT programmes in the UK. The discussion will focus on the internal and external aspects of identifiable factors that have an impact or influence on an individual's experience related to their Academic Self-concept (ASC) (see Table 6.1. below). The external aspects of the participants experience are factors that are more easily knowable and can be seen (see Table 6.1. below). These include, 'dimensional comparison', which can relate to change in place of education such as the move from school to university, or a comparison of academic domains in the form of academic subjects such as English and Maths. These contexts are used to compare how individuals see themselves in relation to their self-perception of ability in academic activities. It will then discuss the creation of support structures which are devised by individuals to assist them with the work required on their courses. The next aspect examines behaviour and responses to participation in group work, followed by responses to various forms of feedback from tutors and peers, and how external achievement or lack of external achievement appears to affect an individual's ASC. Following consideration of the external aspects, the internal aspects of the participants experiences will be discussed. These are generally unseen and potentially unknowable and require further investigation to draw out the participants thoughts and perceptions of being a PGT student and their experience of the academic activities. The internal aspect includes self-belief, which can impact ASC both positively and negatively, although it may not be an 'either or' scenario. It will then examine internal social comparison, how people compare themselves with others. This is followed by choice of behaviour, which relates to decisions made in how the participants behave based on their self-perception of factors that impact on their self-perceived goals. It considers whether ASC changes over time, internal achievement and how the participants feel about themselves in relation to the academic activities they have completed. Finally, it discusses the implications of these findings for UK HEIs who need to, and who succeed in attracting large quantities of international students every year.

Table 6. 1: The External and Internal aspects: The emergent findings.

External Aspects *(things that can be seen)*	**Internal Aspects** *(things that we can only know by asking – hidden, internal, not visible, personal, individual)*
Dimensional comparison	Self-belief
Creation of support structures	Internal social comparison
Group work (External social comparison)	Choice of behaviour
Feedback	Changes in ASC
External perceptions of achievement	Internal perceptions of achievement

6.2. The external visible aspects of international PGT student experience

There are some external aspects relating to ASC that are observable, regarding knowledge of study requirements, as set out above in Table 6.1. These include changes to types of academic activities that were required at UG and PGT level study, which is an example of 'dimensional comparison' as described in previous ASC research (see Möller et al. 2015). Other aspects are working with others, and group work, the participants' creation of support structures, the provision of feedback, and finally external perceptions of achievement. These will be discussed below.

6.2.1. Transition from UG to PGT study, a dimensional comparison.

The change in academic activities required to study at UG level and then on a PGT course was investigated in both the first questionnaire and the first semi-structured interview. This constitutes a 'dimensional comparison' which is a feature of previous ASC research as stated above. For example, the change from one subject of study, such as self-perception in relation to ability in Maths, compared to self-perceived ability when studying English. It has also been used to compare across different settings, such as school to university study, discussed by Rösler et al. (2018). In this research the 'dimensional change' is from UG to PGT level study.

The participants had arrived from different previous learning experiences, and some were unsure what was required in terms of academic activities on their PGT courses. This was identified in the wave one self-descriptive questionnaire (SDQ1) results, (see Chapter 4, Section 4.3.) where the participants identified the type of academic activities, they thought would be needed on their PGT courses. The SDQ findings revealed that their knowledge

of academic activities for PGT level study was not something everyone arrived with, especially experience of the different types of academic writing tasks required at PGT level (see Chapter 4, Section 4.4.). This points to the findings of previous investigators of international student experiences, who found that when international students arrive to study, some may be unprepared for what is required of them, as demonstrated in the literature review (see O'Donnell et al. 2009; Hennerby et al., 2012; McKay et al., 2018; Dimmock et al., 2019; and Skyme & McGee, 2016). In addition, some of the literature which investigated the transition experiences of international students, suggested that they relied on what they knew and what worked for them in the past (see Kaufold, 2015, and Caroll & Ryan, 2005). However, as is evident from the findings regarding knowledge of academic activities supported by the more detailed findings from the first wave of interviews (see Chapter 5 Section 5.3.1.), some of the participants in this study were unable to rely on what they had experienced before. In some instances, it bore no relation to UK PGT level study requirements. This manifested in initial feelings of inadequacy, or negative self-perception, which was revealed in the first set of interviews, and was seen particularly with P1, P6, P7 and to some extent with P8, demonstrating low initial ASC (see Chapter 5, Section 5.10).

This lack of academic activity knowledge was due to the participants previous UG teaching methods and modes of learning, which depended on how their home countries' institutions chose to teach their courses with some using multiple-choice tests, "quizzes" and use of templates to help guide written work (see Chapter 5, Section 5.3.1.) This was easily observable when the data from the participants recounting their UG academic activities was organised into broad global regions or the countries where they studied their UG courses. This revealed the commonalities and differences in the type of academic activities they were required to complete. Those who had studied in Northern Europe for their UG course had a very different experience of the type of academic activities required compared to those who studied in Africa, for example (see Chapter 5, Section 5.3.1). Some of the differences the participants found between their UG and PGT study (see Chapter 5, Section 5.3.2) was the large amount of reading required, the lack of assessment by exam, a change in the amount and type of support offered by tutors, and the necessity to take responsibility for oneself. Therefore, the findings demonstrate that the international PGT students have varying academic activity knowledge and experiences of UG study, which does not necessarily prepare them for the requirements

of studying at PGT level in the UK. Clearly, the participants had very different starting points for their PGT studies. Previous ASC research was also not helpful in this aspect of viewing student diversity of knowledge and experiences as it was mostly set in single nationality contexts, often German secondary schools, as seen in the Literature Review. The few ASC studies investigating university level students also did not consider differences between nationality groups, unlike this study, which presented this opportunity. There is a gap in understanding these experiences that might helpfully be explored further.

6.2.2. Creation of support structures

A visible external coping strategy used by the participants to aid them with the completion of academic activities was the creation of self-support structures (see Chapter 5, Section 5.6.). In the literature these have been investigated as 'support networks' (for example Evans et al., 2018; Taha & Cox, 2016), which denote support from people. However, there were other contributing factors other than a reliance on people, including social media, hence the use of the term 'structure' as opposed to 'network'. In the findings these structures included peers, housemates, a study buddy, a church pastor, previous students who had completed the course already, WhatsApp groups, advice from YouTube, TED Talks and a couple of them said they attended the Academic Language Skills classes created specifically to support international students. Other sources of support such as the library were also available, but these did not seem to feature greatly.

The creation of support structures is demonstrative of participant initiative. They perceived that they needed some form of support, either for reassurance or due to lack of knowledge to make sense of the requirements of being a PGT student. This demonstrates two elements of ASC. Firstly, that they were utilising self-perception to determine there is something they needed to assist them. As just stated, this may be general guidance or something more substantial such as how to complete a certain activity. Reflective writing is an example of an academic activity that some of them would need help with producing as it was not a feature of UG level study. The second element of ASC in relation to the creation of support structures was the potential use of 'social comparison' (Marsh & Craven, 2006) by some of the participants in terms of them seeking advice from those they believed would be able to help them. Therefore, they considered who would be the best option for them by making assessments of peoples' worthiness, and or usefulness, a form a social comparison, by which they also compared themselves

to the means of support they judged could provide the assistance they were seeking. This was evident in the interview data especially with P2, P6 and P7 (see Chapter 5, Section 5.6.1.3.). The method the participants used to determine the capability of others was based mainly on an assessment of whether they possessed some achievement credentials, such as having taken the course the participants were on already and scoring highly, or holding a higher-level qualification in a similar area of study (ibid.). Alternatively, there is also evidence that some of the participants were not so discerning and scrambled to find any source of support that they believed may help them. This was particularly the case for P4 and P1 (see Chapter 5, Sections 5.6.1.1. & 5.6.1.4.).

6.2.3. Group work

Group work was a particular issue for some during their courses. This links to ASC due to the self-perception of their abilities in comparison to others, some perceiving they were more capable and some less capable than their peers using 'social comparison', as depicted by the I/E model (Marsh & Craven, 2006). This was not a constant perception that was maintained throughout their courses. It related to specific activities whereas, other iterations of similar activities demonstrated different responses in the same participants, which will be discussed further below. The findings show that several participants at points on their courses perceived that working with others was inconvenient and irksome, which failed to provide a positive experience and did not help to contribute to achieving their personal aims. They reported it felt that it slowed them down, or they thought it formed a barrier or hurdle to attaining good grades, or they perceived the group work led to lower grades. There is evidence that the participants behaved in non-collegial ways, and potentially undermined the achievements, and learning experiences of others, disempowering them as seen with P6, P2 and P3, who took on the work of others, to ensure the completion of the group tasks (see Chapter 5, Section 5.7.). There is surprising evidence of potential bias by some of the participants towards their peers in group work situations. P1 was very open about his social comparison to others, devaluing their contributions (ibid.). P2 was also open in stating he would only ask for help from people he knew had scored high marks for the same work previously (ibid.) This demonstrates there was some conscious bias at work by some, which was also evidence of positive self-belief in their own abilities (or alternatively, a lack of value in the contribution of peers, with preference for 'experts' such as tutors). Others may genuinely have believed that they were better equipped to complete the tasks. However due to the tying of marks as a group, it was in their opinion necessary to

ensure the work was completed to a reasonable standard. This was an attempt to try and maintain their personal grade point average at a level they had set for themselves. There is no evidence that they were selflessly taking on more work for the benefit of the whole group.

The findings highlight that some people seemed to view themselves as more capable than others as found in the I/E model research (Marsh & Craven, 2006). However, the I/E model did not examine how this might occur in terms of how an individual may behave towards others. This aspect of PGT experience is linked closely to the participants' choice of behaviour, which ASC seeks to predict and explain (see Chapter 2, Section 2.5.1., Shavelson, 1976). However, this type of potentially undermining and dominant behaviour has not been seen before in relation to ASC and provides a unique insight which has so far not been revealed. Most international students chose to study on a UK HEI PGT programme for their own reasons and personal benefit. They were not studying a course altruistically, with an aim to help their peers achieve good results. There are assumptions that international students are thought to contribute to more diverse study experiences and broaden everyone's horizons, particularly, it is thought, for the benefit of home students. They are also thought to contribute to an improved understanding of others and induce better international relations, which McDonald (2014) and Lillyman & Bennett (2014) discussed (see Chapter 2, Section 2.2.2. & 2.2.3). However, this form of sharing is not necessarily prized as a benefit by some of the participants as the findings demonstrate.

In terms of ASC, the participants set themselves targets or goals, often to achieve the highest grades they could, which linked to their level of ASC, as seen at the start and the middle of their courses for most of the interview participants (see Chapter 5., Section 5.11.1.2. & 5.11.2.1.), although, aspirations changed for some, as seen above. The interview participants were all very determined to achieve their self-set goals, which did not incorporate the achievements of others or the hope of creating better international relations. The data suggests that it was all about "me". The participants were front and centre of their own experiences and in directing them to achieve self-set goals (see Chapter 5, Section 5.7.). This was most evident in their behaviour related to group work and discussion activities with peers.

Use of group work and working with others is considered an important part of the co-creation of knowledge in a UK HE institution (see for example Ryan & Tilbury, 2013). Some of the PGT students came from teacher centric educational environments as hinted at by P2, (see Chapter 5, Section 5.10.1.2.). It is not surprising therefore that when they were required to engage as co-creators in their learning, they resorted to what was familiar (as described by Caroll & Ryan, 2005, and Kaufold, 2015) with the teacher or academic tutor being the fount of knowledge, as that is what many had been used to. P1 represented this with his derogatory comments about students wasting his time with their answers (see Chapter 5, Section 5.7.) Suddenly having to acknowledge that peers have wisdom to share, would be difficult when they have perhaps been used to different learning environments where the voice of authority was key to their success. It would be difficult for many to suddenly change their certainty in the education system they had left from their previous domain, and to suddenly adopt a very different way of thinking and behaving. It is understandable that this may have proved more of a challenge to some.

In the group work situations that required students to work together where they could not rely on an authority figure, such as a tutor, they had to find a means through which to work. This provides evidence of behaviour from some of the participants to a further concept from ASC research, namely the "locus of control", as discussed by Rotter (1966), and as demonstrated by Reynolds (1988) as seen in the literature review. 'Locus of control' can point to internal and external factors, but in these cases, it is almost certainly the internal variety, where people take responsibility for their own behaviour, which in this case was in lieu of reliance on the group. Taking responsibility for self is thought to indicate a high Academic Self-concept. Supposedly, such people in Reynold's (1988) research attained higher grades. This link to higher level achievement, does not necessarily equate to the findings of this research, although this was found to be the case in most previous quantitative ASC studies. This research showed that people who thought they needed to assume control of the work of the groups did not necessarily gain high grades in those tasks (see Chapter 5, Section 5.7.). Therefore, their decisions to assume control were generally unsuccessful in helping them achieve the desired high grade.

This behaviour potentially undermines the purpose of group work, which seeks to develop attributes useful for future employment and life in general, such as cooperation, delegation, problem solving, organising, time keeping, and sharing ideas (see for

example Fearon, Mclaughlin & Yoke Eng, 2012). If this is the means of learning and teaching at PGT level, it is strongly suggested that the reasoning behind these activities is made explicit to those who are required to engage in group work and working with others. For many, as seen in the SDQs and interview data relating to knowledge of PGT academic activities, this type of learning was not usual practice on their previous courses. Instead, students were often required to regurgitate textbook information or simply fill in the gaps, unlike PGT level study in the UK, where original thought supported by references to the work of experts in the field is required (see Chapter 5, Section 5.3.2.). There seems little to no evidence in the interview data of working with and valuing the opinions of others, apart from those who had experience of the northern European education system as seen with P5 and P7. Group work is therefore problematic, as there is a disconnect between the purpose of group work from an institutional perspective and the participants aims to achieve their goals, which in turn can impact on their ASC. It also means that their level of ASC may be the reason for attempting to assume control, perceiving themselves as more capable than those they are supposed to be working with, hence the choice of behaviour.

6.2.4. Feedback and grades from tutors.

Different types of feedback including feedback from tutors and grades received were external factors which impacted the participants ASC. Feedback provided validation on the work they produced and was key to how most of the participants perceived themselves. The findings showed that participants responded to forms of validation and most sought it especially from their self-created support structures, if what they wanted was not obviously provided, in their opinion. It was clear that the participants had a variety of experiences in relation to the use and provision of feedback. If one is attempting to learn how to complete new skills, it is helpful to receive guidance on how to complete them, and then receive feedback on the production of the skill to ensure it meets the required specifications. This would be a standard procedure in most situations, especially in a learning environment, and this was reflected in the conclusion of Marsh & Craven (2006) regarding building levels of self-belief to support performance. However, the findings of this research indicated that there was an inconsistent approach in the amount and type of feedback received by the participants. It was clear, however, that it had an important role in the participants' perception of their ASC. For P7, it provided a remarkable change in her self-perception. At the start of the course, she was doubtful of her capabilities, she saw herself as the weakest link in her cohort (see Chapter 5, Section

5.9.2.1.). She strategically sought ways to gather reassurance, and then when she received feedback and a mark beyond her doubting expectations, she was surprised. This acted as a catalyst, and it led to a complete turnaround in her self-belief and raised her level of ASC. She had received validation of her previously unrecognised capabilities which encouraged her to continue. This was similar to P6 who was unsure of her capabilities at the start of her course, but soon gained confidence on receipt of assignment feedback and grades. By the second semester she was exceedingly sure of herself, demonstrated in her responses to questions in the second and third interviews, which was supported by her individual responses to the self-descriptive questionnaires (see Chapter 5, Section 5.9.2.1.). The situation could have been very different had it not been for the validation of her work by tutors. If P7 had not received such strong validation, she may have continued to doubt her capabilities which had caused her stress, and she may have decided to leave the course. For both P6 and P7, their change in self-belief altered their level of ASC from low to high, due to a perceived sense of positive self-belief, or growth in their level of confidence, supporting the REM (Marsh & Craven, 2006) research findings and the chicken and egg debate (see Chapter 2, Section 2.5.4.1.)

One of the participants who started their course on a confident footing, with evidence of high ASC, due to the validation they had received regarding their capabilities on their UG course, saw a distinct drop in their perceptions of their capabilities on receipt of some PGT feedback. This led to a lowering of their ASC. This was the case for P5, who talked about her very supportive and validating UG experience. She had arrived on her PGT course with the ambition to progress to a PhD, such was her ASC at the start of her programme. However, after receiving feedback on her work, some of the feedback induced a feeling of lack of ability, which led to a lowering of ambition and a sense of demotivation, demonstrating a decline of ASC due to a loss in self-perception of her abilities. This contrasted with P6 and P7, who as seen above, were propelled slingshot like to continue, due to their improved feelings of self-belief that had begun with an opposite dimensional comparison, regarding their previous UG experience. P5 had her initial positivity reduced and felt diminished by what she had received, and her career aspirations changed dramatically (see Chapter 5, Section 5.11.2.1.). The feedback may not have formed the entirety of the drop in self-belief, but maybe partly because her expectation of herself was high, based on her previous experience where she had received a First or ‘distinction’ as she called it (ibid.). This situation demonstrates evidence of the Big-fish-little-pond-effect (Marsh 1987) element of ASC research as a

dimensional comparison by P5, who had experience of being a high achiever in a smaller pool of students. On her PGT course she was a smaller fish in a much bigger pond, which led to a lowering of her level of ASC.

Other participants may not have lost the self-belief they arrived with given the same type of feedback. Reactions were very individual. P2, for example, rationalised his disappointment when he felt he was misguided and then failed to meet his self-derived target grade for one piece of work (see Chapter 5, Section 5.8.1.3.). He used it as a form of validation, in this case it was not taken as positive, and he dwelt on the issue for a long time. Overall, it resulted in a positive outcome in terms of utilising it to perform better next time. He ensured he did not make the same mistake again and continued with a sense that he could achieve his aims, despite the unexpected setback. This demonstrated a high level of ASC.

The evidence shows that the feedback provided created changes of self-perception, which had the feedback not been given, self-perception of ability to complete the academic activities would probably have remained linked to any previous self-perception and past levels of achievement. For example, P7 had brought with her the knowledge of the feedback she had received from her UG experience, which demonstrated to her that she was not very capable based on the results and feedback of her UG course. This resulted in low ASC. This altered on receipt of better marks and positive feedback relating to what she produced on her PGT course, in comparison to her previous UG studies, which led her to positive self-belief in her abilities and raised her level of ASC.

There is also evidence that levels of ASC can be maintained after they have changed, as seen with P5 on receipt of further feedback, presenting a similar level of achievement and tone to the previous feedback, this maintained her low ASC. There was a sense of resignation that anything better was not going to be forthcoming. This means that a person's level of ASC can also affect how they receive subsequent feedback. It maintains the perception of the same level of achievement when there is no clear evidence of enhanced achievement in comparison to the previous feedback. This also applied to those whose ASC rose due to high achievement maintaining their self-perception of capability to perform better than they had expected, even if they did not score as highly in subsequent assessments (see Chapter 5,8.1.1.).

There does not appear to be evidence that ASC affects the way feedback is received, unless it radically changed self-perception overall, as in the cases of P5, P6 and P7. Once there was a change from low to high ASC (P6 & P7), or high to low ASC (P5), any additional feedback was perceived as reinforcing the change in perception (see Chapter 5 Section 5.9.2.1 & 5.9.2.2.).

The feedback provided to the participants by tutors, was inconsistent in the amount and type of support given across the programmes. This was found to be problematic for the individuals it affected. Some participants received detailed written feedback, others received ticked boxes on standard marking criteria sheets, which lacked individualised comments on their work, while some only received a grade (see Chapter 5, Section 5.8.). This contributed to the differing consequences as seen above. Although inconsistent, the feedback or lack of it, was utilised by the participants, and led to changes in behaviour, as described by Shavelson (1976) (see Chapter 2, Section 2.5.1.). The content of feedback such as the tone and constructiveness of comments could also predict and explain how the participants may feel and behave in response to it. Examples of changes relate to different combinations of perception of their current levels of ASC, content of the feedback provided, the emotions this engendered from elation and self-satisfaction to disappointment, anger, frustration, and demoralisation (see Chapter 5, Section 5.8.). These combined led to different behavioural responses. Further examples of this are below.

Feedback comments which were perceived as negative as they were felt to be critical of what had been produced and indicated that the work was not correct, or not the standard expected, were used by some as a spur to work harder and try to do better. This was demonstrative of high ASC, as seen in the case of P2 (see Chapter 5, Section 5.8.1.3.) who began the course with a high ASC, although this may have been a ‘face saving’ self-portrayal. The first questionnaire data demonstrated he was not as confident in his abilities as he portrayed in his interview responses. Other participants such as P1 (see Chapter 5, Section 5.8.1.3) who received what they perceived as a lack of useful feedback combined with low marks, felt resentful, but still tried hard despite the knock-back. He appeared to have both low ASC, in relation to knowledge of the academic activities required, but high ASC, in relation to his perception of his capabilities despite not achieving as highly as he envisaged. This is contradictory, resulting in what appears to be high and low ASC existing simultaneously, potentially demonstrating a constructed

paradigm which can consist of things that appear to be true and false simultaneously (see Chapter 3, Section 3.3.4.) This does not fit with findings of previous research and will be discussed again later. This was also, to a certain extent, evident in the case of P4, who also seemed to have a high ASC but demonstrated low levels of achievement. Interestingly, they shared similar UG experiences in the same region of Asia. Whereas another in the same situation, but from a different educational country and background, who received low marks and critical feedback, who had low ASC, was resigned to receiving low marks and accepted that they would not do any better, which was the case for P5. Conversely, those who received positive feedback and were provided with comments related to good performance were satisfied with the support they received. They were motivated to continue in the hope of maintaining positive feedback.

In relation to grades, P8 did not necessarily appear to have a particularly high or low ASC, unlike P6 who had high ASC which was linked to perceived high achievement and high marks. P3 however, received high marks for his work, which was combined with a lack of written feedback. Despite the very high marks he achieved, he showed signs of low ASC. Therefore, it cannot be assumed that high levels of achievement equate to high ASC or that low levels of achievement lead to low ASC. The data shows complexity. There seem to be other factors impacting levels of ASC as demonstrated above.

The lack of consistency in tutor feedback means that international PGT students are having very different experiences of teaching and learning, which as seen above, has contributed to a variety of self-perceptions' of their individual ASC. From an ASC perspective, feedback needs to be so much more than a grade and some words, and certainly more than a grade and no words. Tutor feedback has a potentially powerful role to play in a student's perception of self. It could determine whether a person has a positive ASC, or the tutor's feedback responses perpetuate an existing low ASC, creates low ASC, or conversely contributes to raising students out of low ASC by instilling a more positive sense of self, and a belief that an individual can perform better. This could be achieved by providing advice on how this is possible. This has the potential to change ASC from low to high, which in turn may impact levels of achievement. If a person believes they are capable of something, they are more likely to achieve it. Therefore, attempts to build-up a person's self-belief in their capabilities is crucial for achieving higher levels of ASC, supporting the opinions of Marsh & Craven (2006). The issue is

working out how this is possible when institutions have thousands of students, many of whom, maybe in need of confidence boosts.

6.3. The internal unseen aspects of international PGT student experience

The findings and the concept, even as depicted in the name itself, reveal how Academic Self-concept is very personal and related to an individuals' perceptions and experiences, and perceptions of their experiences, much of which would remain unknown were it not revealed by asking the people concerned. Even the external aspects, which are deemed visible, contain a myriad of internal wranglings with self-perception as seen above. There is no neat and clear division between them. This is unlike Shavelson's (1976) linear model of General self-concept (see Chapter 2, Section 2.5.1., Figure 2.1.) which separates the four different facets of self-concept. Academic Self-concept was separated from the three non-academic facets, Emotional, Social and Physical self-concepts. This creates a sense of detachment between the academic and non-Academic Self-concepts suggesting a lack of interconnection. What is observable externally, fails to convey the internal impact, which is where research into international students is lacking, as what looks to be the case from the outside, may not in fact reflect what is reverberating on the inside of a person. Assumptions made are only assumptions, and an individual's external behaviour may not invoke the questions required to understand their choice of behaviour and how they feel about themselves alongside others. Although, the data has been divided into external and internal aspects, the findings do not provide a clear separation of the two aspects, in the same way it is not entirely possible to separate the other facets of general self-concept from each other, despite Shavelson's et al. (1976) depiction. It might be possible to frame research findings to only focus on single facets or aspects, but the data will be less rich and less representative, providing only a partial view of the situation. The following sections will focus predominantly on the internal unseen and possibly not easily knowable aspects of the international PGT participants' experience, including self-belief, social comparison, their choice of behaviour and how ASC can change over time.

6.3.1. Self-belief

One of the key components of ASC, as mentioned above, is 'self-belief', which is related to levels of 'confidence'. High levels of confidence can equate to positive self-belief, which is thought to demonstrate high levels of ASC. This has been shown to lead to higher grades, according to some of the literature (see Telbis et al., 2014; Moogan, 2018 and Reynolds, 1988). However, evidence from this research found that this is not necessarily

the case. The basis for the participants' confidence was considered in both the interviews and in the SDQ data. At the start of their courses many were uncertain about their level of confidence as they recognised that studying in the UK was different from their previous study experiences and at the time of their first interviews most had not received feedback for any of their work. In terms of their ASC at that point, they all had varying levels, as discussed above, some began their courses with high ASC, based on their self-perception of their achievement on their previous UG courses, whereas, other participants expressed a lack of self-belief and a lack of confidence based on their previous experiences on their previous courses, for example P6, as she had not studied for a long time (see Chapter 5, Section 5.5.) and P7, who was not happy with her performance on her UG course (see Chapter 5, Section 5.3.2.3.)

The SDQ data provided an overview of the participants' changes of self-belief, which seems to equate to their level of confidence (see Chapter 5, Section 5.9.1.). In the interviews, the participants were able to elaborate on their thinking about their levels of confidence, which were mostly influenced by feedback from tutors for completed work, and from peers and trusted sources of advice, in the form of their self-created support structures. To a large extent social comparison to others also featured. This reflected the BFLPE of ASC (Marsh, 1987), in which students compared themselves to others who they perceived were either more able or less able than themselves (see Chapter 2, Section 2.5.3.3.), and the I/E model (Marsh & Craven, 2006) in which the participants compared themselves to other people in the same domain, in this case, peers studying the same subject and completing the same academic activities required on their PGT courses. Some pitched themselves against their peers, which is evidence of social comparison, and they noticed and absorbed the level of ability of others in comparison to themselves, suggesting an element of competition. P7 perceived herself as one of the weakest in her year group at the start of her course, which changed on receipt of a better grade than expected as discussed above, but P3 was in secret competition with his peers (see Chapter 5, Section 5.4.1.) attempting to outperform them when he knew what stage they had reached in their work.

There were two SDQ statements which asked the participants to directly consider themselves in relation to others. These were, *1.5. Most of the people on my course are smarter than I am,* and *1.11 I am able to do better than other people on my course* (see Chapter 4, Section 4.5.3.1. & 4.5.3.2.). For the first statement, the results show that a

third of the core participants were reticent to commit to one side or another, when asked, which remained the same for waves one and two. This indicated that two-thirds of participant's (who completed all three SDQs) thought they were smarter than their peers from the beginning of their courses. By the end of their courses, this had increased to over 84% perceiving themselves as smarter. This demonstrates a change for some in their self-belief.

The second question (*1.11)* had a more pronounced change over the three waves. In wave one only one person in the core participants thought they were able to do better than others. In wave two this increased to five participants (38%). In the final phase this doubled with ten participants (77%) perceiving themselves as able to do better on their courses than others. This is evidence of growth in self-belief and a change in their ASC. This demonstrates that over the period of their studies, most people felt they were more able than their peers, by the end of their courses, compared to their opinion of themselves at the start. This seemed to be mainly related to their feedback and grades. However, not all the participants scored as highly as others. Therefore, there may be something else contributing to their self-belief in their ability in comparison to others and is not solid evidence for high ASC.

Despite the evidence above suggesting a change in self-belief and growth in confidence in comparison to others, which should have led to high ASC, there were clearly some participants for whom this did not apply. Not all the participants felt a sense of confidence, even though they produced work that was awarded high marks (see Chapter 5, Section 5.9.2.2.). This finding contradicts the I/E model as discussed previously, as despite high marks some had a low level of ASC, which was the case with P3. He did not seem to perceive his high achievement as such. Conversely, as must have been the case above with changes in self-belief, despite not everyone receiving high grades, low scoring students may have been truly delighted with their attainment as they had achieved an aim, which had a personal connotation, regardless of external observation and opinion regarding the grades they achieved. For others this may not have seemed so impressive. This was represented by P8, he was perfectly content with his grades and had a high ASC even though his scores were not as high as others (see Chapter 5, Section 5.8.2.3.)

Both P3 and P8 appeared to derive their feelings about their grades internally, rather than relying on external validation in the form of grades and feedback. This reflects their level

of self-belief, which contributes to their level of ASC (see Chapter Sections 5.8.2.2. & 5.8.2.1.) The knowledge P8 was gaining was an important factor for him, not the external marking system, and P3 was also more interested in learning than grades. Individual feelings cannot necessarily be dictated by external factors. However, ASC research indicated that was the case, represented in their findings; high marks equated to high self-belief (see Marsh et al 2018). Some of the participants in this research presented very confident looking from the exterior personalities, presenting what could be considered a high level of ASC, but with an underlying lack of confidence in their knowledge and capability to complete the academic activities that were required of them. They eventually revealed how unsure they were over the three waves of interviews, which may not have been detected otherwise. P3 was a high achiever, if high grades equate to high achievement, but the findings show that he did not perceive this about himself. He lacked confidence and self-belief and despite performing very well on his course, he did not perceive that what he achieved was good enough in his opinion (see Chapter 5. Section 5.8.2.2.). This lack of self-belief and confidence, as stated above denotes low ASC. He was interested in learning out of a sense of curiosity, but the grades awarded must have been important if he felt dissatisfied with them. P3 and P8 present potentially opposing points on an ASC continuum, with P3 at one end demonstrating high achievement and low ASC, and P8 at the opposite end with lower achievement in comparison to P3 and others, but with high ASC, which was not a feature of previous ASC findings. This is another example of two simultaneously existing but opposing paradigms, as seen above, with evidence of high and low ASC appearing to exist at the same time in the same person.

6.3.1.1. Trajectories of self-belief

The experiences of validation in the form of assignment feedback, as seen above, (see Chapter 5, Section 5.8.) demonstrated how self-belief can be affected by both external and internal factors. External as the feedback is provided by others, but internal due to how it changes the participants' self-perception. These changes can be tracked and viewed as general directions of travel. These could be termed 'trajectories' to indicate the movement of the change in how the participants reflected on their capabilities. A general term to describe this could be '*trajectories of self-belief*.' In different iterations of ASC research, the RE/IM model, and integrated approaches (see Chapter 2, Section 2.5.4.), changes in self-perceptions, were identified in longitudinal studies, which were of sufficient length, usually consisting of several waves of data collection over several years

or semesters of study. These trajectories were evident in this research in the SDQ findings, which tracked changes of self-perception of knowledge over the three waves of data collection and in the interview data. This was assisted by the longitudinal nature of the research over the entire duration of the participants courses (see Chapter 5, Section 5.4.), as opposed to the beginning and the end of one semester in which no change was found (see Gorges & Hillman, 2019).

In the findings, the participants' trajectories of self-belief were seen to change positively and negatively over the duration of their courses (see Chapter 5, Section 5.9.). The factors influencing the trajectories included dimensional comparisons, which comprised what they were used to on their previous courses, feedback and grades, sense of self-belief or lack of it, and self-created support structures with specifically selected sources of advice (see Chapter 5, Sections 5.3., 5.6., 5.8., 5.9. & 5.10.)

The self-descriptive questionnaire data provided the clearest picture of the trajectories of self-belief in the responses to statement *1.9, I know what is required of me to study at PGT level.* These responses show the general trends in perception for the interview participants, and also in the view of the wider SDQ1 respondents. The literature suggests (see: Moogan, 2018, and Telbis et al., 2014) that once international students had discovered what was expected of them in terms of course requirements and confirmation of grades for work completed (respectively) that the participants in those two studies saw a growth in confidence. However, this is not what was found for all participants in the findings of this research. When the SDQ responses to statement *1.9* are examined in relation to the interview participants, (see Chapter 5, Section 5.5.) it is possible to see how their self-perception of themselves in relation to what they needed to complete on their PGT courses changed over the three waves of data collection. Thereby, this provided evidence of movements in self-belief over the duration of their courses.

Each participants response was different. Out of the eight interview participants, three perceived there was a decrease in their knowledge of what was required at PGT level, two showed an increase, one oscillated first up and then down returning to where they started in wave one by wave three, and two believed they remained consistent throughout the duration of their programmes. Thus, this demonstrated evidence of movement in self-perception for some. When this was compared to their overall changes in self-perceived

confidence (see Chapter 5, Section 5.9.1.), the data mostly mirrored the findings for question *1.9.* concerning their perceived knowledge.

Changes in self-belief can be seen across the three waves of data for all the interview participants. Some of these changes were slight but do show a decline or an increase in levels of self-belief and therefore in their ASC. Decreases were evident for P2. Although the results appeared consistent, the balance in the level of self-belief declined slightly with more *goods* than *very goods* by the end of the course. P4's self-belief decreased overall from wave 1 to wave 3, as did P5. Clear increases were seen for P6, P7 and P8. P1 was still unsure about some things at the end of his course but his self-belief had increased a little since wave 1. Finally, P3 in a similar way to P2 was mostly consistent overall, but with changes in the balance of *very good*, *good,* and *okay,* with fewer *very goods* in wave two and three than in wave one. Therefore, the participants' self-perception of their ASC changed over the duration of their courses and was not the same in each wave, moving either up or down, depending on the type of academic activity that was being considered.

6.3.2. Feelings of uncertainty

There was evidence in the findings of the participants experiencing different feelings at certain times during their studies. These included a sense of not knowing, concerns about feeling stupid, a sense of fear, feeling lost and being out of a comfort zone which led to a sense of lack in ability to complete what was required of them. These perceptions are evidence of potential low ASC due to a lack of self-belief (see Chapter 5, Section 5.10.). Some of these feelings were possibly due to loss of the familiar and the removal of previous boundaries and scaffolding, which guided and supported the participants on their UG courses. P2 expressed this the most at the start of his course (see Chapter 5, Section 5.10.1.2.). He was surprised at being allowed to say what he thought with the freedom to criticise the opinions of tutors and not just repeat textbook information. He was offered the opportunity to find his voice and was at first a little unsure about this. This removal of the comfort of knowing what is required to study, and the knowledge that one's own voice is required seemed to instil a sense of anxiety to varying degrees in most interview participants. Once on their PGT programmes, there was a feeling of a lack of tight boundaries, as though the 'elastic' had stretched further and could no longer hold them in place. There was a realisation by most that they were required to take responsibility for themselves. It was now possible to go anywhere they liked intellectually,

having perhaps previously been subject to more limited fields of thought and means of working within them as found in the interview discussions about the UG study requirements (see Chapter 5, Section 5.3.1.). The removal of these boundaries may be a reason why some students felt lost at the start of their courses, a feeling which lasted longer for others, such as P1 and P4. The structures that previously held them in place on their UG courses were no longer required or available. Learning to understand a new reality may not be easy, some felt a sense that they were lacking, which demonstrated low ASC. Whether there is causal link in relation to lack of self-belief as a cause of low ASC or low ASC being a cause of lack of self-belief may depend on each participants starting point, as discussed above, with their 'trajectories of self-belief'. This would equate to a potential negative version of the 'chicken and egg debate'. This can be analysed by comparing the evidence from the SDQ data, which considered the participants levels of confidence throughout the duration of their studies (see Chapter 5, Section 5.9.1.) with the feelings of lack expressed in the interviews and the timing of these expressions (see Chapter 5, Section 5.9.2.). For example, P2's ASC at the start of the course was demonstrably high, based on his SDQ responses (see Chapter 5, Section 5.9.1., Table 5.1b) However, he expressed a sense of fear about writing a dissertation, which he did not report until his final interview, which suggests evidence of low ASC. This could mean that he was not being entirely honest about his capabilities at the start of his course, or as the data shows his ASC very slightly lowered due to concerns about his lack of capability, thereby establishing a causal link between negative or low self-belief and lowering ASC.

Another example is P5, who also began her PGT course with high ASC due to her positive UG experiences. As a result of feeling out of her 'comfort zone', which was her supportive UG course, she began to feel she was lacking in her capabilities through not performing as well as she had expected once she started to receive feedback on her work (see Chapter 5, Section 5.9.1., Table 5.2e). Additionally, P4 began with a high ASC (see Chapter 5, Section 5.9.1., Table 5.2d) and like P5, discovered that the capabilities she thought she had at the start of her course, were not as good as she perceived and felt frustrated. This led to a lowering of her ASC (see Chapter 5, Section 5.9.2.)

These examples demonstrate a change in levels of ASC, most probably caused by feelings of lack leading to lower ASC. Their ASC was shown to be higher prior to the

change of feelings, caused by a change in their levels of self-belief that they had earlier in their PGT course.

6.3.3. Changes in strategy and ASC contradictions

The findings provide clear evidence of changes in opinion about how well the participants thought they used and developed their academic activity knowledge and their strategy towards the work required. This appeared in both the qualitative and quantitative data. Most of these changes were positive over time, although patterns of movement were varied and very individual. Some of these have been outlined, such as P7 and her move from low to high ASC, due to the grade and feedback she received for her assignment in semester one. This contrasts with P5, who began with high ASC based on achieving well on her UG course and then finding that she was not as capable as she thought in comparison to others on receipt of feedback, which saw a lowering of her ASC as discussed above. Some of the interview participants, such as P2, P3, P4, and P5, changed their approaches to the academic work required, usually after they had received feedback on their work, and in response to disappointment and lower grades than expected (see Chapter 5, Section 5.4.1. & Section 5.8.). However, those who received higher grades than anticipated chose to maintain their strategies based on the grades they received, as already referred to above.

For those who did make changes to their strategy to complete the work required, the reasons for the changes were related to their perceived levels of achievement, received feedback, support from self-selected sources, and social and dimensional comparisons. Only one participant admitted that he did not have a clear strategy at the beginning of his course. P1 had his “go with the flow” approach, which he ascribed to himself, which may not have been entirely successful (see Chapter 5, Section 5.4.2., P1, interview 3).

He seemed to finish his course still slightly confused about what was required and unsure of the meaning of the concept of the course he had studied, which was the focus of the entire two years of his programme. He was the participant who seemed to need help, and the most intolerant of the opinions of others. He had a strong regard for his own assessment of issues. He expressed a lot of positive self-belief, which would generally indicate a high level of ASC, which was not really the case for this participant. He clearly considered his capabilities, recognising that the system was different, and that at the start of his course, he had no idea what to do or how to do it. Despite suggesting he did not

have a strategy as he stated in his final interview (see Chapter 5, Section 5.4.2.), the strategy he developed over his course, included self-reliance, and advice from friends. He was aware of his lack of knowledge and inexperience of the academic activities required and he responded to feedback when given by course lecturers, but this was not always provided as he hoped.

This does not sit easily within a model of ASC. He had high self-belief related to a personal perception of internal confidence, which in most previous research is a key component of high ASC, but at the same time perceived his distinct lack of knowledge of academic activities which would suggest low ASC. This again indicates the simultaneous existence of low and high ASC in the same person, which is not representative of previous ASC research. Therefore, the evidence that ASC is either high or low, which means that academic achievement is correspondingly high or low does not work in this instance in a higher education context.

This finding is also not restricted to one participant, as discussed above, P3 and P8 also did not fit neatly into an 'either/or' high and low ASC based on previous findings. P3 achieved high grades but demonstrated low ASC based on a perception that he could do much better, and P8 was very happy with what he produced, although did not score high grades, which for others would equate to low achievement and therefore should equate to a low ASC. Maybe this is indicative of a too narrow focus on academic self, there are other parts of self that are at play. The General Self-concept framework (Shavelson et al., 1976) as discussed previously has four facets, including Social, Emotional and Physical Self-concepts, perhaps these elements of self are more intertwined than this study and previous studies considered. There is clearly more to the constitution of ASC than an 'either/or' finding that ASC is high or low based on how well people perform which is an inadequate conclusion. The evidence in this research does not support this. There is a conflict of perception in some individuals which previous ASC research has failed to conceptualise.

6.3.4. Academic Self-concept and achievement

Achievement has been a key component of much ASC research. For the participants of this study, previous levels of achievement were related to their UG course and occasionally their school level experience, which acted as benchmarks for the participants to compare their perceptions of their achievements on their PGT courses and

were used as a cross dimensional comparison (Helm et al., 2016). Achievement in ASC models is usually related to grades and test scores as measures of success or achievement as seen in much of the previous ASC research. This research has used the term ‘success’ synonymously with achievement. Common sense tells us, away from the literature, measures of success can be very personal. In relation to postgraduate international students, success for them could mean gaining a place on the course of study, it could be graduating with a distinction, or it could be just obtaining a pass. It may also just be for the experience of living in another country. Success is measured by different people or institutions for their own purposes, and therefore it is an ambiguous concept. What one person considers to be success, maybe another person's mediocre, or for another exceeding expectations as exemplified by P8 and P3. When asked, ‘success’ meant different things to the participants (see Chapter 5, Section 5.11.) including a quiet life and a sense of contentment, satisfaction for accomplishing an aim, maximizing potential, and achieving dreams, fame, and recognition or achieving self-set targets. Only two participants equated success to their study grades.

In the ASC models, academic achievement plays a clear role in Academic Self-concept. Marsh et al. (2016) using REM as already discussed, found that people are more likely to make more of an effort with their academic work if they are also high achievers, and therefore successful. They also considered the impact of failure, which may lead to a decrease in effort as “trying hard and failing would further undermine their [students] subsequent ASC” (2016:1274). Therefore, academic success should lead to a high ASC and positive self-belief, or a high level of confidence. However, the term ‘success’ for the participants in most cases was not related to academia so did not correlate with ASC. It did, however, feature in discussions about their aims for completing the course, which were more focused on gaining the best grades (see Chapter 5, Section 5.11.2.) which does link to success, but clearly achieving high grades was not necessarily their main focus for completing their PGT courses, despite many of them setting themselves target grades.

The participants perceptions of achievement did not necessarily follow the patterns established in some of the previous ASC research. Fear of failure for P7, demonstrated low ASC and was based on her experience of UG study, which was changed on receipt of high grades. This contradicts the suggestions that low ASC in one domain can lead to “consistently negative” self-belief following subsequent effort (Marsh et al., 2016). This

was not found to be the case as subsequent effort in a different domain led to positive achievement and an increase in positive self-belief and a high ASC. The same can be said for P6 who was doubtful about her capabilities but then was successful with her work and ergo much more confident in her capabilities and continued to achieve, supporting previous ASC findings. However, in relation to success, as already discussed, P3 did not fit this pattern and despite success in the guise of high achievement, he was dissatisfied with his performance. Maybe he thought of himself a failure in comparison to his self-set standards of achievement, which would fit with Marsh's et al (2016) comments above. P5 also fitted this failure finding and felt undermined by lower than anticipated grades which led to a lowering of her ambitions (see Chapter 5. Section 5.11.2.1.)

What is clear is that the participants would try and find whatever means they could to enable them to complete their work. They demonstrated their strategic-ness and determination to achieve their specific goals. It is more evidence in support of ASC research and the Reciprocal Effects Model (REM) (Marsh & Craven, 2006) and the 'chicken and egg debate' in which achievement and ASC are mutually reinforcing and lead to gains in one another. Therefore, when the participants perceived that they were not achieving their goals, the evidence shows they sought help to assist them with their aims. This is a step further than the REM's parameters as they not only perceived their level of achievement and low ASC, but they took measures to counteract them in attempts to improve their level of achievement (see Chapter 5, Section 5.4.2.), which the findings confirmed, led to higher achievement and a positive ASC in most but not all the participants experiences.

However, contrary to the REM 'chicken and egg debate' of Marsh and Craven (2006) high self-belief from the findings of this research is not always supported by high achievement, and consequently, high achievement appears to be in the eye of the beholder for these international participants studying at PGT level. As discussed previously, one person's gold medal may be another person's bronze or simply having taken part, and they may be happy with that outcome and feel confident in that result. Therefore, a high ASC may not denote a high level of self-belief based on high achievement. However, for the participants of this research it depended on where they derived their validation, which meant for the majority, the role that feedback and marks played could be pivotal, as the findings demonstrate.

There are clear correlations between ASC and ‘achievement’ or ‘success’. They are the means of establishing possible levels of ASC and for predicting how an individual may respond and feel consequently. Although, how they behave may depend on a variety of factors and may be more complex than previous ASC research has shown, with additional relational factors to consider at a higher level of study. The next section will consider the implications of these findings for HEIs.

6.4. Implications for UK HEIs.

Understanding what is happening in the experiences, thoughts, and beliefs of international students on PGT courses provides an insight into their thinking and can raise awareness of their behaviour and the approaches they take to their academic work. Viewing it through an ASC lens offers an opportunity for greater understanding of why some PGT students appear to struggle or find themselves lost. The following section will consider the implications these findings bring UK HEIs. This includes the different knowledge base and previous study experiences equating to a variety of starting points for PGT level study, the creation of self-support networks in lieu of university support, evidence that it is possible to alter a person’s self-perception and level of ASC, the simultaneous existence of low and high ASC in the same person, and issues relating to group work.

6.4.1. Different starting points

The participants' Academic Self-concept was impacted by several factors, one of which was understanding what was required of them in terms of the academic activities required to complete their work. Many students arrived possessing gaps in knowledge of academic activities for PGT level study. This was due to the teaching and learning activities of their UG courses, some countries’ HE education system focused on different types of academic activities compared to the UK. HEIs potentially need to consider these different levels of knowledge and find a means to identify and bridge these gaps. Previous experience contributes to students’ level of ASC as the findings have shown. Therefore, as external factors can influence some individuals' levels of ASC, a better understanding of their starting points would assist with identifying what level and type of support they may need.

6.4.2. Use of available support

The data revealed that some students do not make use of the academic support that the HEI offers especially for them. Instead, they created their own self-support structures based on different people who they perceived were more capable than they were, such as high achieving students who had already completed their course. They also utilised trusted flat mates, their peers, people they knew outside of the institution and technology in the form of YouTube videos. In-house HEI support, the library and academic skills classes was seldom referred to by the participants. This may indicate that the support offered is not meeting their needs, or they are unaware of it. This links back to the previous section and the need to know more about their starting points, HEIs need to meet the students where they perceive themselves to need support. This may require more tailored opportunities focusing more on individual needs than blanket approaches. This could prove difficult to manage, but as the data has demonstrated not all international PGT students need or seek the same things or for the same reasons. The view through an ASC lens has revealed complexity, which will require more thought by HEIs to address.

6.4.3. HEIs and their power to change an individual's self-perception.

HEIs have the ability to influence and change an individual's 'trajectory of self-belief' leading to high or low ASC as has been demonstrated in the findings. This is not applicable to all people as it depends where they derive their validation as discussed above. Those who value external opinions regarding their academic work have been shown to be influenced by it changing their level of ASC from low to high as seen with P6 and P7. The opposite affect was experienced by P5. This resulted in a diminished ASC. Herein lies a massive opportunity to raise individuals' self-perception by means of tutor feedback. Although, this may only help those who prize and are influenced by its contents. Tutor feedback and grades do not have the same impact on all, as demonstrated, but it was a deciding factor on the amount of subsequent effort some of the students made (see Chapter 5, Section 5.8.). For those who have a more internal focus and are not so accepting of external sources of opinion, a different approach would need to be determined, as it would be required.

6.4.4 Amount and type of feedback

HEIs may like to consider the amount and type of feedback they provide to their PGT students. The findings of this research show that for those participants who utilised their

feedback, they appreciated feedback that was constructive, provided guidance on what was done well and identified how their work could be improved for subsequent submissions (see Chapter 5, Section 5.8.). Feedback that consisted of only a grade without comment, or ticked rubric sheets providing standard set phrases were not considered to be very useful (see Chapter 5, Section 5.8.1.2). Individualised comments that can raise levels of positive self-perception, for whom this is effective, would be preferable.

HEIs may also like to review their institutions feedback practice to ensure that students are receiving similar amounts and type of feedback. This would provide more equitable teaching and learning experiences and less dissatisfaction when students compare feedback practices with their peers on other programmes.

6.4.5. The ASC paradox.

The data revealed evidence of those who appear to have simultaneous perceptions of high and low self-concept. This was seen mostly with P1 and P4. For HEIs this may be difficult to rationalise without knowing the causal effects of this paradox. Identifying it at all would probably only occur when investigating PGT experience focusing on this type of enquiry. It is not something that would be obvious, unless an analysis of the type of behaviour is evident by these participants and could be used as an indicator of this. For P1 this behaviour included a very high sense of self-belief in his abilities. However, he lacked the knowledge of what was required to complete the academic activities with over-reliance on others to solve his issues, but a perception of superiority over others, whose contributions, despite needing the help, were not always valued. Much of this behaviour would need to be unpicked to establish its origin. Something else seems to be involved which would require a more psychologically focused investigation than this study allows. It is problematic however, possibly in these instances addressing the cause of the low ASC maybe the key to assisting in these cases, but it would be necessary to discover what this may be. One possibility is that this could relate to previous educational experiences in different domains. Once there is an understanding of the source or sources of such self-perception, which led to the exhibited behaviour, appropriate support could be found. The ASC lens does not offer a mechanism for such rationalisation. Further investigation is required to better understand these findings.

6.4.6. Re-evaluating group work

The interview data provided an insight into how self-perception of ability in group work led to social comparison with peers combined with self-set goals, which produced a form of self-serving undervaluation of some group members by some participants. This was mainly by those who believed they were more capable of achieving a high grade. This would suggest they had a high ASC based on the findings of previous ASC research such as Marsh et al., 2016, and Hoferichter et al., 2018. This led P2, P3, P6 and P1 to assume responsibility for the work of others, as they either considered their peers to be incapable of producing what was required, or they thought they were not contributing properly or 'at all' to the task. Rather than a cooperative co-learning opportunity, it was a source of stress, resulting in some students dominating the groups for their own gain to maintain or achieve a high grade. It did not demonstrate a supportive learning environment. It failed to lift or encourage those who may have been struggling to complete their portion of the task. HEIs need to consider the efficacy of group work as it is impacting on ASC. Overall, low grades were reported for these activities and dissatisfaction with the whole process. It is potentially a philosophical dilemma. The purpose and benefits of group work activities have been discussed briefly above. However, if these ideas are not shared by those who are supposed to be benefitting from them and they are used as opportunities to attempt to 'get ahead', then who are the benefactors? Those with high ASC are not the benefactors as they are not achieving their goals, and those with low ASC are not benefactors as they are left further discouraged maintaining their low level of ASC. There is probably a need to make the purpose and benefits of group work explicit prior to its use to try and combat the need for some students' desire to be the best. This may be considered counterintuitive as people should be allowed to do well and is what understanding ASC seeks to encourage. It also may risk undermining the high level of ASC of those who perceive themselves to be the high achievers. However, it is also not helping those with low ASC who are influenced by external factors to rise above their self-perception of their ability to complete the work required and be their best. The continuation of the situation in which some students dominate, while others fail to contribute, will only perpetuate the group work dynamics and the behavioural cycle will continue as will their respective levels of ASC.

6.4.7. Summary

For HEIs the use of an ASC lens and the emergent findings suggest the need for some re-evaluation and pause for thought. HEIs responses to students and the support offered

can play a crucial role in how students perceive themselves leading to high and low levels of ASC. Firstly, HEIs needs to take better account of the PGT students' starting points. The findings show that not everyone is starting from the same playing field, let alone a level one. This has implications for the type and level of support for individuals, which may require more tailoring to ensure its usefulness and appropriacy. HEIs also need to understand the power they possess to alter the self-perception of individuals through the feedback provided to their work. This has the ability to change the trajectory of a person's self-belief leading to a lowering or a raising of ASC, which impacts on subsequent effort invested in their work. The amount and type of feedback should be considered to ensure a level of consistency. Finally, some thought regarding the use of group work and its potential to perpetuate existing levels of ASC is required.

6.5. Chapter summary

This chapter has discussed the emergent findings from both the quantitative and qualitative data in chapters four and five. It has viewed these in relation to the key themes of ASC research, along with the findings of others' regarding international student experiences in HE as discussed in the literature review. It considered the data from two viewpoints, an external aspect with a focus on the things that can be seen, and the internal aspects which cannot be seen and are not immediately obvious requiring further enquiry with the individuals concerned. The external aspects examined evidence of dimensional comparison between the domains of UG and PGT level study. It has considered the creation of support structures to provide guidance and reassurance on the work they were required to complete and the use of a strategic approach to the choice of support with evidence of social comparison. The attitudes and behaviour to working in groups or with others was discussed. It provided evidence of a lack of collegiality, and a focus on self, and further social comparison. Then the receipt of feedback from tutors and grades was shown to be pivotal for ASC for many, but not all, depending on an individual's source of validation. It also demonstrated that the participants had different experiences of feedback and therefore very different university learning and teaching experiences. It was also shown that there is evidence of high and low ASC existing in the same person at the same time, which has not been shown before in previous ASC findings. The chapter then moved to focus on the internal aspects of the participants experiences, which included all the external aspects but viewed from behind the scenes, which included the participants self-belief and the evidence of how this changed over the duration of their

programmes, also demonstrated by their trajectories of self-belief and how this links to levels of confidence and levels of ASC. It then discussed the participants' lack of sense of self, or feelings of negativity or uncertainty, and how these also provided evidence of changes in ASC over time. Changes in strategy towards their academic activities were also evident based on a variety of factors, which were outlined. This highlighted some contradictions in the findings also not seen in previous ASC research, which may be due to the model from which ASC derives. This was followed by a discussion about achievement that has been the focus of much ASC research and its relation to the term success. It considered the difficulty arising from this research not finding the standard patterns found in previous ASC research, resulting in a more complex picture of the participants' experiences, which do not necessarily support past ASC findings, and potentially extend them. Finally, it discussed the implications of this research for UK HEIs, including the need to address the different starting points of students, the lack of use of specifically created support, how HEIs have the power to change individuals' self-perception through feedback and how ASC demonstrates evidence of an existent paradox. The final chapter which follows, provides a conclusion to the work and recommendations for the future.

Chapter Seven: Conclusion

7.1. Chapter introduction

The conclusion seeks to clarify the answers to the research questions based on the review of the literature, the evidence, the analysis, and the corresponding discussion as presented in the previous chapters. It will discuss the contribution to knowledge, the limitations and make recommendations for HEIs for consideration and review of policy, with suggestions for future investigations.

The research has reviewed literature showing the importance of international students to universities both culturally and financially. It discussed some of the difficulties international students are thought to have in their transition to PGT level study and attitudes towards them related to their perceived deficits, counter claims of deficiencies and measures taken to support students. It highlighted the lack of students' sense of self, missing from research into international students, and proposed the lens of Academic Self-concept through which to view international PGT students' experiences of academic study. Previous studies of ASC have predominantly utilised quantitative methods with a focus on mainly school-aged children, unlike this research, which focuses on PGT students in the UK, utilising both quantitative and qualitative methods.

The methodology chapter explored the philosophy and theoretical perspectives of the research. The rationale for the research design was discussed and the creation of the research instruments, including ethical considerations. It provided details of the research process and methods for analysing the data using an emergent grounded theory approach, which was applied to both types of collected data to reveal the findings.

There were two chapters which focussed on the findings. The first presented the quantitative data. This was in the form of the self-descriptive questionnaire results over the three waves of data collection, encompassing the entire duration of the participants' PGT study. The second data chapter related to the interview participants. It comprised mainly qualitative interview data from the semi-structured interviews with some support from the questionnaire results.

Finally, the discussion chapter considered the findings through the ASC lens and related literature. It revealed the dominant emergent themes from the data and the international PGT students' experience of studying in a UK HEI. This included their attitudes, behaviour, capabilities, knowledge, and the changing sense of themselves. It revealed some previously unrecognised or discussed elements related to ASC.

7.2. Answer to the research question

The main question to which this research was seeking an answer is:

To what extent does the Academic Self-concept affect the experiences of a group of international postgraduate students studying at a UK HEI?

The subsidiary questions are:

- What experiences of being an international PGT student demonstrate the participants' ASC?
- Does the participants' ASC change over the duration of their courses? If so, how, and why?
- Is there a correlation between the participants' ASC and confidence (self-belief), and ASC and success (achievement), and if so, what is it?
- What does this mean for the support offered to these international PGT students for their UK HEI, and for UK HEIs more generally?

7.2.1. What experiences of being an international student demonstrate the participants' ASC?

Sense-of-self and therefore ASC was clear in relation to these international students' experiences of PGT study. This was seen in the dimensional comparison of their UG and PGT programmes, which required them to reflect on the differences between studying at different levels and they found that they were not the same. The students recognised they needed additional knowledge to complete the academic activities required at PGT level.

The setting of goals to aim for as a measure of their personal achievement, was also evident in the data, which impacted on their responses to group work and working with peers. Some participants decided they needed to take charge of their groups' work due to marks being awarded to the whole group rather than individually. They wanted to

ensure they were able to meet their self-set goals, for example to achieve over 70% for all their assignments. This sometimes resulted in them disempowering others, based on their social comparison that some of their peers were not as capable as they were, demonstrative of the I/E Model of ASC and the Big-fish-little pond effect. Therefore, they assumed responsibility for the work to ensure they attained their target grade, which in most instances was unsuccessful. However, this was clear evidence of ASC as they were considering their desired achievement and acting based on their aim to ensure it happened.

Responses to feedback in the form of tutor comments or lack of them, and grades received demonstrated individual ASC. These were used by the participants as guidance, seeking what needed to be improved on their next piece of work. Feedback had the power to change trajectories of self-belief either positively or negatively as was seen in the findings. Lack of feedback also had a powerful impact leaving some without guidance and maintaining levels of ASC related to previous experiences or feedback received. It did not assist with creating a change to a person's ASC. However, not all participants sought validation from feedback which affected change. As was seen in the previous chapters, a couple of the participants did not show evidence of change in their ASC based on feedback. Their validation was derived from something undetermined, outside the scope of this research.

The creation of personal support networks show that the participants were reflective about their knowledge and capabilities and actively sought what they perceived they needed from people or sources they thought could assist them. This also demonstrates their ASC and like the questionnaire results showed, they were perceptive about what they lacked in most cases.

Unlike previous ASC research, the findings demonstrated the existence of low and high ASC in the same person simultaneously. This was shown in slightly different ways in some participants. The first example was a person lacking knowledge of what was required to complete the work, which would usually demonstrate low ASC, but this was found to be in combination with a very high self-perception of their capabilities, a feature of high ASC. This combination was not a feature of previous ASC research. A further example of paradox was found, this time with a person who scored highly, generally denoting a high ASC, combined with low confidence in their capabilities, which would

suggest low ASC. Conversely, there was a participant who did not score well compared to others, suggesting low ASC, but he was content with his marks, demonstrating high ASC. None of these combinations support or were found in the various models of ASC.

7.2.2. Does the participants' ASC change over the duration of their courses? If so, how, and why?

There was evidence of change in the participants' ASC, identified in the responses to both the questionnaires and in the interviews relating to their knowledge of academic requirements. For most participants this was shown to increase, along with their confidence in their ability to complete them. This was shown in the trajectories of self-belief, which was dependent upon a combination of factors including their level of confidence at the start of their programmes, their previous experience and level of performance on their UG courses, which they brought with them as a measure and comparison of their perceived capability. Additionally, feedback and grades received for completed work, and social comparison, where they believed themselves to sit capability wise in relation to their peers were also indicative factors.7.2.3. Is there a correlation between the participants' ASC and confidence (self-belief), and ASC and success (achievement), and if so, what is it? The investigation into confidence and success as features of ASC linked to self-belief and achievement were evident. Changes in confidence were seen in all three waves of data collection. Success or achievement also correlated with ASC in the form of self-set goals as seen earlier, and changes in aspirations for the future for some. This research shows a variation on the previous ASC research findings in relation to achievement connected to the I/E model's chicken and egg debate, as high achievement was not always commensurate with high ASC and vice versa.

7.2.4. What does this mean for the support offered to these international PGT students for their UK HEI and for UK HEIs more generally?

In terms of what this means for the HEI, reflection is required on how the institution views and responds to the students. HEIs hold immense power to alter most students' self-perception and therefore their ASC. Understanding their previous experiences and their starting points may assist with the realisation that they do not all arrive fully equipped with knowledge of the type of academic activities required of them at PGT level. Many lack confidence in their capabilities, although, this depends on their starting point and previous experiences of studying on their UG courses. Therefore, there is confirmation that students are 'deficient', although this term has negative connotations, and a more fitting term is desirable.

The questionnaire findings provided evidence that the support required by the international PGT students was not all the same. They had issues with different academic requirements at different points in time. Therefore, a more individualised means of support is preferential. However, the findings also indicated that university support provided was not used by many of the students and instead they created their own networks of help. This is a challenge, and effective means of support need to be considered, if indeed they are required.

A further consideration for HEIs is the amount and type of feedback given to PGT students. The research showed that they are having very different teaching and learning experiences at the same institution. As stated above, feedback has been shown to be a powerful tool impacting students' self-perception both positively and negatively, and resulting in high or low ASC, depending on whether they use it as a form of validation. Some do not.

Additionally, group work proved to be problematic. This was impacted particularly by the tying of grades to a group, which created unhelpful group dynamics. Some of those who perceived themselves as more capable, used social comparison and disempowered those they considered less capable than themselves to ensure they reached or maintained their self-set goal.

7.3. Theoretical framework

The research findings can be depicted as a theoretical framework. Figure 7.1. illustrates this depicting what ASC looks like for international students in a HE context as discussed above. It demonstrates the connections between previous and current experience in relation to ASC. The blue section illustrates the aspects of their study experiences that influence ASC. These are also factors in how ASC changed for the participants during their PG studies. The section below provides how knowing more about the students' ASC and the influencing factors may contribute to understanding more about student learning behaviour, student retention and student outcomes and could be utilised by various stakeholders.

Knowing about the students' ASC can be utilised by various stakeholder. This would require communication with students directly to understand their experience to establish their ASC. It can reveal how they behave in relation to learning and could help student

support services, programme leaders and tutors to better understand and appropriately respond to the students' perceived needs rather than assuming they already know what they are. It can assist with providing the students with a voice.

Use of the knowledge of ASC via the theoretical framework could also help universities trying to understand student attrition, and a means to support student retention, which is important to all university stakeholders. This could be achieved by using ASC to consider student experiences to identify reasons behind their actions or feelings, which again would require direct communication with the students.

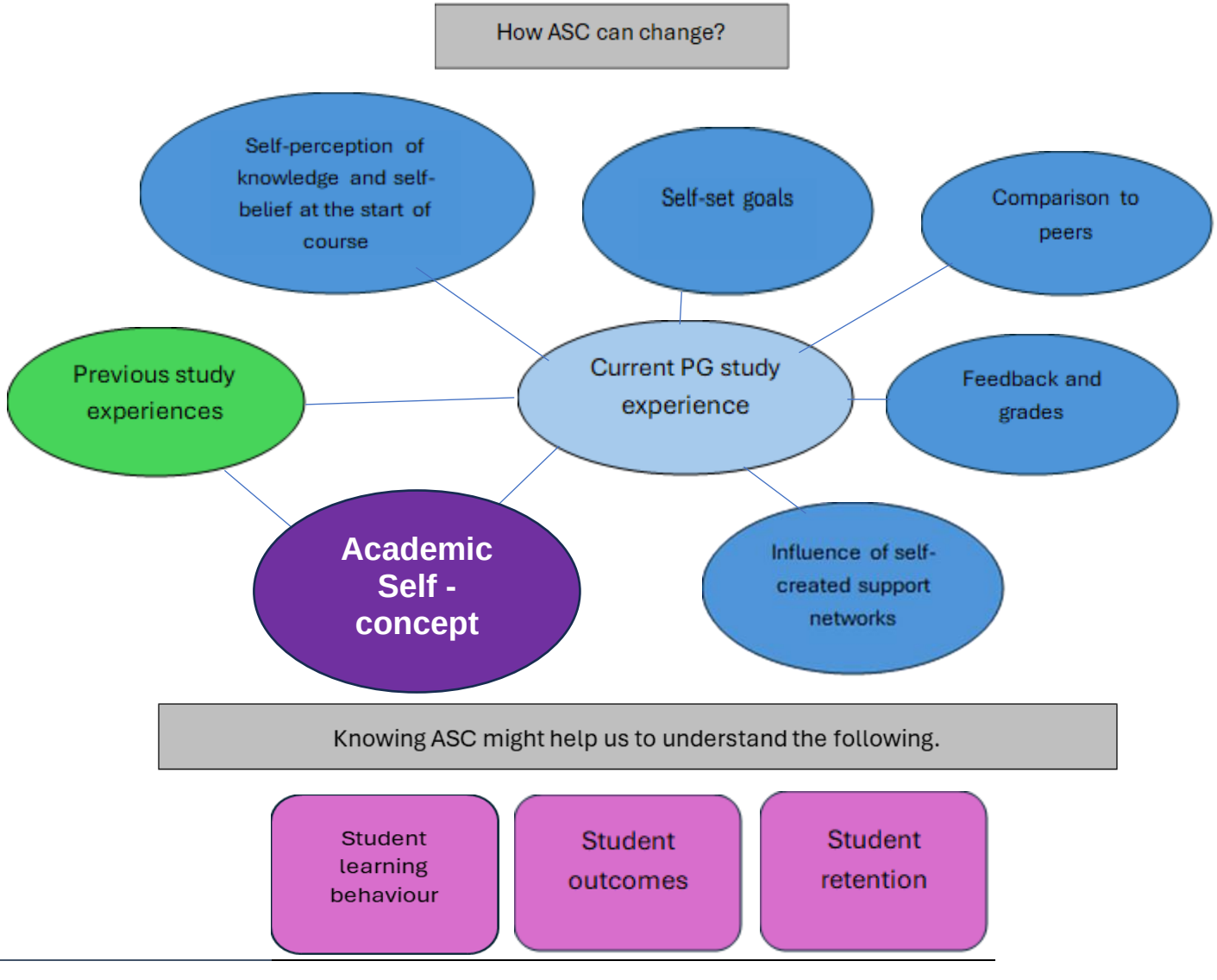
It could also be used by various stakeholders, particularly those with an interest in student outcomes, to understand the students' motivations and aims for completing their courses, to ensure they are meeting expectations, or by managing expectations. Outcomes contribute to university rankings, which is a key performance indicator and could contribute to gaining more students in the future by demonstrating that students are supported well and as a result achieve their aims. Although, this does not necessarily mean that the aims of the stakeholders and the students are the same. Understanding their ASC would assist with this.

Finally, it could be used with students as a learning tool for reflection on their study experiences and as an aid for both students and guidance tutors and academics to understand their starting points, and to provide guidance and signposting to sources of support, if required. It may also assist with identifying what these sources of support could or should be.

Being able to identify students' ASC can contribute to seeking resolutions to troublesome issues that institutions face in relation to students' learning and in terms of them being a student. It underlies and runs through individual students' experience, which is often not possible to see by other means.

Figure 7.1 ASC in a HE context

ASC is informed by the following:



7.4. The contribution to knowledge

This research contributes to knowledge as it has taken a concept from the field of psychology, mainly used to investigate the ASC of school aged children (principally in Germany) and has applied the concept to a HEI context in the UK, with a specific focus on international PGT students of mixed nationalities and different programmes of study. This is unlike other research into international students that has tended to focus on a specific subject area and/or nationality group.

It has added to research into ASC with the use of qualitative tools. Previous investigations of ASC have almost exclusively used quantitative tools, usually self-descriptive questionnaires, whereas this research added a qualitative element of investigation using semi-structured interviews. This is a unique approach to ASC investigation.

The data analysis applied was also unlike previous ASC investigation. It applied an emergent grounded theory approach to the data analysis, which provided an alternative view of the data, compared to the mostly statistical analysis of other studies. Therefore, some of the findings of this research have not been a feature of ASC investigations. This is probably due to the addition of the qualitative data, which provided more depth than quantitative responses allow.

Additionally, the type of participants was different to most previous ASC research. They were adults completing PGT study. They had different backgrounds, needs, and aims to those of school children. They were more autonomous learners and were expected to take responsibility for their own learning, which provides a different more complex aspect to ASC than may perhaps be expected of school aged participants.

This research has provided an insight into PGT student experience from ‘behind the scenes’, requiring exploration of their thinking and self-perceptions in real-time over the duration of their whole programme. This may not have been possible for a person time limited by full-time PhD study. It has provided privileged access and opened the often-unexplored thoughts of individuals about their experience of being an international PGT

student in relation to the academic activities they were required to complete. Therefore, it contributes to knowledge by applying ASC in a different way to previous studies, highlighting the inner perceptions of international PGT student experience that would otherwise be unknown and unrecognised.

7.5. Potential limitations of the research

There were a few limitations to this research. These relate to the context, the participants, and the choice of research lens. These will be discussed below.

7.5.1. One institution

The research was deliberately based at one institution. The students who chose this institution may be different and not representative of the wider international PGT student body UK wide. However, they were representative of the institution's student body. Therefore, the findings represent the participants in the setting it was based. Further research would need to be conducted in other institutions to establish whether similar findings are replicable in other UK HEIs.

7.5.2. Participant numbers

As seen in the methodology chapter, there were reducing numbers of participants for the quantitative investigation. However, it was still possible to establish trends in the data for these participants, who were representative of the international PGT students at the institution, as discussed above.

7.5.3. Participant representation

The original plan was to gather representation from all four faculties, but engaging and encouraging potential participants was a challenge. The Faculty of ADSS had the fewest international PGT students out of all the faculties. The only representation in the findings from ADSS was in the first self-descriptive questionnaire, with eight participants out of a possible total of fifty-seven entrants that year. There was only one participant from ADSS who completed the two subsequent surveys. This has limited the broad view of the PGT students. However, it was still representative of the international student body as there are very few international PGT students studying Arts and Design subjects, it therefore provided accurate representation of the cohort.

The other potential limitation in relation to representation was the range of nationalities from which the participants were drawn. The institution recruits from many countries but often there are large cohorts from a few countries and none from others. There was a range of different nationalities who participated, but it must be noted that this was limited to those who were recruited by the university and then those who were willing to participate. Purposeful sampling was used, but it still relied on willingness to participate, and therefore it was not entirely possible to deliberately choose or target specific nationalities, which may have limited the findings, although the participants did reflect the balance of nationalities of the institution in general.

7.5.4. Too broad a view

Some critics may suggest that this research is limited by attempting to recruit such a board and diverse range of international PGT students. It may have been better to focus on a narrower cohort who were neatly packaged and labelled as one nationality studying one subject, or to focus on one subject and a range of nationalities limited to that area. This would not have provided the data to challenge previous research into international students in higher education. To demonstrate the challenges that diversity and lack of commonality brings to institutions, it is necessary to examine it as it arrives and presents itself to the institution. This is potentially a helpful way of seeing what is. It is not a tidy experiment into an aspect of a particular subject area. It was designed to gather a bigger picture, firstly, in recognition of the approach taken by the original researchers of ASC, and secondly to emphasise the nature and the diversity of the international student body faced by institutions. By choosing to take a broad-brush approach to who was included in the research, it was possible to then separate the bristles to see what is going on underneath and behind the scenes for those international students who participated.

7.5.5. The choice of concept

The choice of concept has not been used in the same way as previous studies. Although it may be unusual for the concept of ASC to be used in this context, to investigate the ASC of international PGT students, it does begin to fill the recognised gap in the lack of qualitative exploration of ASC, as discussed in the literature review and methodology chapters.

7.6. Recommendations

As a result of the findings and discussion, a number of recommendations are suggested. These concern a reappraisal of the view of international PGT students; understanding their choices of support and how they could be better supported; a policy on the amount and type of feedback provided to students; to try to further understand the ASC paradoxes, and to find an opportunity to test the research tools.

7.6.1. A reappraisal of international PGT students

The research demonstrates how valuable international students are for academic institutions in terms of the diversity and the contribution they can bring to enhance and improve global perspectives for all other students and staff, and the incredibly valuable financial contributions they provide. International PGT students do not necessarily arrive prepared for PGT level study as the findings convey. The view as seen in the literature that they require “fixing” is not what this research has found. The participants in this research have demonstrated their determination and resilience in the face of lack of knowledge and confidence in aspects of the academic requirements of PGT level study. They strategised and then they modified these strategies when new information arrived, as they thought necessary. They were not incapable and did not need “fixing”. What they potentially need is institutions to understand their experiences better, rather than assuming the reason why they do not perform as well as they would like them to is due to lack of language or academic ability. The first recommendation is for the institution to more regularly take the time to understand their international students, by making the effort to discover their previous experiences and provide clear means for their students to acquire the missing pieces of the puzzle that they face when they arrive to begin their PGT courses. This could provide better understanding of the participants' previous academic study experience and knowledge of potential gaps.

7.6.2. Seek to further understand the choice of sources of support.

Linked to how international PGT students are viewed is their search for sources of support. The participants demonstrated they sought support to help them with the academic work required, but they were not all utilising what was readily available from the university. The research showed that they created their own networks and bypassed specifically prepared provision. An investigation into why international PGT students do not use the provided provision should be conducted. This would assist with reviewing current provision and reshaping it for those who seek support but do not benefit from

what already exists. The literature showed that much time and effort is expended in seeking to resolve the 'issue' of appropriate levels of support for international students. The simplest recommendation is to cease assuming what they need and taking blanket approaches in resolution. Time and effort need to be made to speak to the people who seek support. Ask them. A mentoring system or known and familiar guidance tutors maybe key to ensuring they have someone to ask for advice and who can get to know them and their needs. A more tailored approach is probably necessary and will improve the student experience. This has the potential to feedback to their home communities and in turn may increase interest in studying at the institution due to the supportive atmosphere it would create. This would be of benefit to all.

7.6.3. Consideration of the purpose and use of group work

The use and purpose of group work would benefit from a reappraisal to address how it perpetuates or diminishes the ASC of PGT students. The instigation of individual marks may be a simple means of addressing the imbalance in the lack of effort by some and the dominance of others who disempower those they consider less capable. Clarity for students on the aims and benefits of group work may also assist with levelling the ground, although those who seek to achieve their aims may not be responsive to requests for more equity for others, especially students with high ASC who want to maintain their levels of perceived achievement. This is especially difficult, and it relates to different perspectives and values which HEIs have that are not necessarily shared by those who hold other values from other places.

7.6.4. A policy on the amount and type of feedback provided to students.

The findings revealed different approaches to the amount and type of feedback provided to the participants. For most participants, the content of feedback can have profound effects on them. It can change their self-perception and demeanour. Feedback is a powerful tool and can form the basis of how a person perceives themselves and others. However, with the variation in the amount and type of feedback given, the participants were having very different experiences. It is recommended that the approach to feedback has minimum standards, to attempt to be more equitable. It should include links to where to seek additional advice as well as some positive and useful comments to aid development. In addition, ensuring PGT students understand and have the appropriate language to discuss how they are marked at their level should also be factored into discussion7.6.5. Understanding the ASC paradox.

Further research into the existence of ASC paradoxes could test whether they are an anomaly of this research or a feature of ASC in other HEI contexts. This may be achieved by replicating the qualitative element of this investigation to discover if there are other examples of the phenomenon. Previous research, which has mainly used quantitative tools, was able to identify aspects of ASC, but it did not move beyond and delve into what the participants chose to do next and the reasoning for their behaviour. The different paradoxes of high and low ASC existing at the same time, but in different ways in individuals, was only identified following conversations with reflections by the participants of their perceptions concerning aspects of their lived experiences over time. The ASC lens did not offer a means to explain why this might be the case. To take the ASC lens further, additional means of investigating, such as qualitative tools, to explore why individuals behave and perceive as they do, which illuminate the potential complexity of ASC, as found in this research, would help identify and better understand the participants of ASC research and potentially lead to a clearer, broader, and deeper picture of ASC as a concept. .6.6. Test the research tools.

It is recommended that the tools used in this research are used again in subsequent research to ascertain the replicability of the findings. By its nature qualitative data is not completely replicable, but the themes and what they reveal may be. This would involve using the same SDQs and the semi-structured interview suggested conversation prompts to see if the same themes emerged in a similar way to this research. Thereby, testing to see if there is any identifiable consistency in subsequent findings if the same methods and analysis were used again.

7.7. Closing summary

This thesis has provided an investigation into the experiences of international PGT students at one UK HEI. It used the lens of Academic Self-concept, which seeks to better understand how students' self-perception of their abilities in an academic domain can predict or determine their behaviour and their sense of self. It has shown that ASC plays a distinct role in the issue of confidence but may not be the same for all. It has shown how validation in the form of feedback is a powerful tool and can play a pivotal role in terms of the self-perception of some of the students, which needs to be provided more equitably. The institution needs to consider its perception of its international PGT students and the view that they are 'incapable' and 'deficient'.

The findings of this research provide evidence of perceptive, determined, and capable people who devised means of completing what was required of them on their programmes of study, thereby demonstrating changing levels of ASC. It has demonstrated that they were very capable, even if they had gaps in their knowledge, which they strategically attempted to address using individual means to assist them in completing their courses. Those who are constantly searching for means and methods to support international PGT students would benefit from speaking with those they are seeking to help. Values HEIs seek to promote, as exemplified in some participants' reactions and behaviour related to group work, need to be considered. The existence of ASC paradoxes would benefit from investigation.

Academic Self-concept has been an interesting lens through which to view international PGT experience. It has revealed a view from the participants of their lived experience as it was happening, which included navigating how to proceed with their aims through a global pandemic and a change to required working practices, which again demonstrated their resilience, strengths, determination, and their success in completing their studies. A view through the ASC lens has shown how these individual participants and other individual international PGT students in general should not be underestimated in their quest to study a master's level course in the UK. HEIs also need to recognise the power they hold to influence most of their students' self-perception and ASC, and to ensure it is used to raise everyone, for the benefit of everyone.

Appendices

Appendix 1: Overview of previous ASC Research

Overview of measurement tools for self-concept						
Authors	**Date**	**Topic/Title**	**Research questions?**	**Research tools**	**Participant information**	**Quantitative/ Qualitative or mixed method**
Van Soon, C & Donche V.2014	2014	Profiling First year Students in STEM Programs Based on Autonomous Motivation and Academic Self-concept and Relationships with Academic Achievement	1. Can different motivation and Academic Self-concept profiles be discerned among first-year college students in STEM. 2. Is gender associated with motivation and Academic Self-concept profiles? 3. Are motivation and Academic Self-concept profiles associated with early academic achievement?	Motivation-Academic Self-regulation scale - questionnaire (12 items)	3500 first year STEM students	Quantitative

Gogol, K., Brunner, M, Martin, R, Preckel, F., Goetz T.	2017	Affect and motivation within and between school subjects: Development and validation of an integrative structural model of Academic Self-concept, interest, and anxiety.	Goal of study - to extend the integration of the diverse perspectives and fragmented findings and gain new insights into the structural relations of three key affective constructs in educational psychology. (Can't find specific q?)	Looked at 3 core subjects, maths, French and German. Academic Self-concept measures: items taken from Self-Description Questionnaire (Marsh and O'Neil, 1984). -academic interest= 3 items in general and 3 subject specific in questionnaire. Academic anxiety = 3 items in general and 3 subject specific. Measure of achievement = students grades and standardised competency test.	9th Grade students participating in a school monitoring programme in Luxembourg	Quantitative

Erten, I.H & Burden R.L	2014	The relationship between Academic Self-concept, attributions, and L2 achievement	1. To what do year 6 students attribute their performance in a school-based achievement test? 2. How do level of achievement and Academic Self-concept interact with student attributions? 3. Is it possible to predict student achievement by means of the Academic Self-concept and attributions reported by language learners? If so, what are the best predictors?	Demographic and background info. Latest English test score. Academic Self-concept - Turkish Version of Myself0AS-a Learner questionnaire - 20 items+ an achievement attributions questionnaire based on Weiner's 1992 and 2010 internal/external vs. controllable and uncontrollable framework - 9 questions	267 6th Grade students in Turkey	Quantitative

Curtain, N., Stewart, A.J., Ostrove.J.M.	2013	Fostering Academic Self-concept: Advisor Support and Sense of Belong Among International Domestic Graduate Students.	1. Are there differences between international and domestic doctoral student experiences of graduate school. 2. Is advisor support and belonging related to Academic Self-concept in both groups?	Demographic, background info relating to ethnicity, financial situ, international status. Questionnaire - importance of grad school experience - 4-point scale =waste of time to extremely important. Research related experiences, - 3 items, Professional development experiences, - 3 items, social experiences- 1 item, advisor support - 19 items strongly agree to strongly disagree, sense of belonging- 15 items, Academic Self-concept- 8 items not true at all - very true	PhD students who have completed at least one year of graduate school.	Quantitative

Marsh, H.W. & Shavelson, R.J & Byrne, B.M	1988	A Multifaceted Academic Self Concept: Is Hierarchical Structure and Its Relation to Academic Achievement	Study 1 - focus on the comparison of models positing a single higher order academic factor by Shavelson 1976 and 2 higher order factors - Marsh & Shavelson 1985. Study 2 the I/E model tested with response of the 3 self-concept instruments. Not entirely sure what the questions are!!	3 different self-concept instruments SDQIII (Marsh, Barnes & Hocevar, 1985; Marsh & O'Neill, 1984; Richards & Barnes, 1986. -, the Self-concept of Ability Scale (Brookover, 1962; Shavelson & Bolus, 1982) & the Affective Perception Inventory (Soares & Soares , 1979). School grades in English, Maths and all school subjects. I/E model	11th and 12th grade ss in Canada	Quantitative
Marsh, H. W. & Martin, A.J.	2011	Academic Self-concept and academic achievement: Relations and causal ordering		Review of studies		

Reynolds, W.M	1988	Measurement of Academic Self-concept in College Students	Looking at the validity of the Academic Self-concept scale as a measure of academic facts of general self-concept.	Demographic information: sex, age, GPA, SATs scores, college major etc. Academic Self-concept Scale, I/E Scale (Locus of Control); Self Esteen Scale (Rosenburg, 1965) (for General self-concept) The Marlowe-Crown Social Desirability Scale (Crowne & Marlowe, 1960, 1964) (Social desirability)	589 UG students from 3 colleges in USA	Quantitative

Matovu, M.,	2014	A Structural Evaluation Modelling of the Academic Self-concept Scale	Aim to validate the Academic Self-concept scale by Liu and Wang (2005). 2 research questions: a. whether the Liu and Wang (2005) Academic Self-concept scale was appropriate to measure Academic Self-concept among university students. B. whether university students' Academic Self-concept influenced their academic achievement.	Academic Self-concept scale -20 items - 7-point scale agree - disagree	280 UG students in Malaysia	Quantitative
Baudson, T.G., Jung, N., & Freund, P.A.,	2015	Measurement Invariance in Grid-Based Measure in Academic Self-concept		DISC Grid 8 items of ASC crossed with selected school subjects. 6-point scale 1-not true to 6 exactly true. Also, ss gender, age, grade level, school type, and grades in German, English and maths.	1,524 German students	Quantitative

Marsh, H.W., Lichtenfeld, S., Arens, K. A., Pekrun, R., Guo, J., Murayama, K.	2016	Breaking the Double- Edged Sword of Effort/ Trying Hard: Developmental Equilibrium and Longitudinal Relations Among Effort, Achievement, and Self Concept.	Hypothesis 1 (correlations): Consistently with previous research we predict ASC, effort, test scores and school grades to be positively correlated with each other within each of the four waves of data. Hypothesis 2 (Path coefficients): REMs are used to test the causal ordering of ASC, effort, and achievement in our REM... Initially, separate SEMs are conducted for school grades and test scores, and then both indicators of achievement are considered in the same model. Hypothesis 3 (Robustness of Path Coefficients)	Questionnaire and school grades	3144 German students in secondary school	Quantitative

King, R.B, Ganotrice Jr, F.A., & McInerney, D. M.,	2012	Cross-Cultural Validation of the Sense of Self (SoS) Scale in Chinese and Filipino settings	a. The extent to which four-factor structure of the SoS which has been found among Western students can be replicated in a Chinese and a Filipino Sample. B. how the interpretations of the different factors of the SoS are different and similar across these two samples. c. how the SoS in both contexts relates to other theoretically related constructs such as achievement goals. Hypothesize - sense of purpose, self-reliance, and positive self-concept will be positively related to the 3 goals.	Sense of Self questionnaire 26 item (Watkins et al 2002). And (Genotrice and Bernado 2010) 4 factors in SoS - sense of Purpose - 6 items, Self-reliance (8 items) Negative self-concept (7 items) Positive self-concept (5 items) + Inventory of School Motivations (King et al 2012) Ganotrice et al. 2012)	1406 adolescent high school children in Hong Kong (697) and the Philippines (709)	Quantitative
Wouters, S., De Fraine, B., Coplin, H. Van Damme, J & Verschueren, K.	2012	The effect of trach changes on the development of Academic Self-concept in High School: A dynamic Test of the Big-fish-little Pond effect.	Hypothesis. - decline in Academic Self-concept across high school	Stoel's (1980) global Academic Self-concept scale, Dutch and Maths test results	Grades 7,8, 10 & 12 High school students	Quantitative

Marcer, S	2011	Language learner Self-Concept - Complexity, continuity & Change	1. What is the nature of the beliefs in this learner's self-concept in the FL domain? 2. To what extent do this learner's language	Open response interview (Copy available)	German Foreign Language Learners aged 19 +	Quantitative
Lent, R.W, Gore Jr, P.A. & Brown, S.D.,	1997	Discrimination and Predictive Validity of Academic Self-Concept, Academic Self-efficacy, and Mathematics-Specific Self-Efficacy.	Aim to validate the Academic Self-concept scale by Liu and Wang (2005). 2 research questions: a. whether the Liu and Wang (2005) Academic Self-concept scale was appropriate to measure Academic Self-concept among university students. B. whether university	1. demographic characteristics. 2. Academic Self-concept. 3. Self-efficacy -. 4. occupational aspirations. 5 in group testing sessions 6. academic aptitude-ability and performance data - use of various questionnaires to measure self-efficacy and self-concept.	205 psychology students at university in USA	Quantitative

Komarraju, M., Musulkin, S. & Bhattacharya, G.	2010	Role of Student-Faculty Interactions in Developing College Students' Academic Self-concept, Motivation, and Achievement	Hypothesis 1. seven aspects of student-faculty interactions (respect, guidance, approachable, caring, interactions outside if class, connected, and accessible) and students' Academic Self-concept, intrinsic motivation, extrinsic motivation, and achievements; and 2. one aspect of student-faculty interaction (negative experiences) and amotivation (lack of motivation).	questionnaire: Student-Professor Interaction Scale, Academic Motivation Subscales and Academic Self-concept Scale.	242/950 UG students mid-size university in USA	Quantitative

Appendix 2: Information for students.

Carrie McCullock
Northumbria University
Northumbria Language Centre
Northumberland Building 106E
Northumbria University
NE1 8ST

carrie.mccullock@northumbria.ac.uk

Dear student,

My name is Carrie McCullock and I teach academic English to International students at the university, but I am also a student studying for a PhD. I am hoping to research postgraduate (PGT) students' perceptions of the academic skills you are required to complete on your course and your understanding of them.

The reason you have been asked is because you are a PGT student. It is hoped that the information gathered will provide a clearer insight into how PGT students perceive some of the academic tasks required to complete your courses to better understand how you perceive what you do.

Further information is included in the attached information sheet.

If you have any questions, you can ask me in person or email at the address above.

Thanks for your time,

Yours sincerely,

Carrie McCullock

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Northumbria Language Centre,
Northumberland Building 106E.
Northumbria University
NE1 8ST
carrie.mccullock@northumbria.ac.uk

Supervisor: Graham Hall

E: mail: g.hall@northumbria.ac.uk

Information about the study:

What is the study about?

This research will investigate international postgraduate students and their perceptions of the academic tasks they are required to complete on their courses. It will examine how this may change over the year, and how the tasks required compare to what you had to complete on your undergraduate graduate degrees.

Why have I been asked to participate?

You have been asked to participate as you are an international postgraduate student. The information you provide could help to contribute to a better understanding of the international postgraduate experience. If we can understand your experiences of academic tasks, it may help others who go through the same experiences in the future.

What will I need to do?

All you need to do is complete a series of 3 on-line questionnaires at the beginning middle and end of the course and if you would like to help with the research further, I am looking for people who are willing to tell me more about their experience of studying in their own country and in the UK. We will meet 3 times over the year after you have completed each of the questionnaires.

What do I do next?

If you are willing to participate, please complete the online survey and include your contact email address and choose a code name, which you will remember.

What happens if I do not want to participate?

If you do not wish to participate that is okay. You do not have to if you do not want to. Participation or non-participation will have no consequences on your final marks. The researcher is not involved in marking any of your work.

What if I say yes and then change my mind?

If you would like to take part, you are free to change your mind at any time and can withdraw from the research without a problem.

How will it be recorded?

The interviews will be audio recorded and then written out.

Secure storage of data

All data will be securely stored and backed up on computer and will only be accessible by the researcher as it will be password protected. A hard copy will be kept in locked storage and will be destroyed after 5 years.

Confidentiality / anonymity

The data will remain anonymous, and you will not be named.

What will happen at the end of the study?

At the end of the research the data will be published as part of my PhD. Some of this information may be presented at conferences or used to help develop university policy or for staff development.

Complaints or issues

If at any stage, you wish to make a complaint regarding this research you need to contact my supervisor: Graham S Hall in the first instance: g.hall@northumbria.ac.uk

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Supervisor: Graham Hall
E: mail: g.hall@northumbria.ac.uk

Consent form

Please tick the boxes if you agree with the statements.

☐ I have read and understood the purpose of the study.

☐ I have had the chance to ask questions which have been answered to my satisfaction.

☐ I am willing to be interviewed and participate in the questionnaires.

☐ I am happy for my comments to be digitally recorded and written down.

☐ I understand that all data from our interview will be kept and destroyed in (e.g. 5 years)

☐ I understand that I can withdraw at any time if I change my mind.

☐ I know that my name and details will be kept confidential.

Please sign your name below:

Signature: _____

Print your name: _____

Date:_____

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