

# Study expectations of 1st/2nd generation STEM postgraduate taught students

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# Abstract

**Purpose** – Although there is an increasing body of literature looking at the postgraduate student experience, there is a lack of research and knowledge in understanding the impact of postgraduate (taught) PGT students' learning experiences prior to their postgraduate study, and their expectations of studying at PGT level. The research undertaken in the Faculty of Science, Engineering and Computing at a post-1992 institution, which focuses on STEM disciplines (science, technology, engineering and mathematics), aims to correct this deficiency by providing valuable data and insights into this nationally and internationally largely neglected area. This paper seeks to report the notable findings of first and second-generation respondents.

**Design/methodology/approach** – Data were collected via a hard copy questionnaire that had been developed through previous research and with staff and PGT course representative input. It was distributed and completed by new taught postgraduate students during the orientation period in September 2012. It was entered into the Statistical Package for the Social Sciences (SPSS) and a range of tests were run on the data.

**Findings** – This original research highlights the similarities and differences between first and second-generation respondents' prior learning experiences and their expectations of studying at postgraduate taught level.

**Research limitations/implications** – The findings from the research presented was conducted over a one-year period and the findings are based on the limitations that such a time and financially limited project can offer. The university concerned is a post-1992 institution and has a high concentration towards teaching functions. What is observed at this UK HEI could be replicable in other teaching oriented organisations thus merits further research.

**Originality/value** – The findings from this original piece of research offer potentially important contributions to the current PGT debate looking at developing and expanding PGT provision and ensuring its sustainability.

Keywords Feedback, First-generation, Postgraduate taught, Second-generation, Expectations

Paper type Research paper

# Introduction

In the past 15 years within the UK, postgraduate taught (PGT) study has seen a dramatic expansion in student numbers. Statistics from the Higher Education Statistics Agency (HESA, 2005), show that in 2003/2004 the number of students undertaking a PGT qualification in the UK totalled 262,693 but by 2010/2011 this had increased by 31.5 per cent to 345,000 (HESA, 2012). The increase in the PGT student body at the Post-1992 institution has been more dramatic than at national level with an increase of 57 per cent by 2010/2011 on its 2003/2004 figures (HESA, 2012). Prior to



Quality Assurance in Education Vol. 22 No. 2, 2014 pp. 169-184 © Emerald Group Publishing Limited 0968-4883 DOI 10.1108/QAE-03-2013-0014 2010, the part-time study mode had been the most popular mode at national and institutional level, but in 2010 this was replaced by the fulltime mode.

The reasons for the increase in PGT study are numerous. Evidence suggests that Postgraduate study is increasingly undertaken for career advancement rather than self-fulfilment (e.g. Stuart et al., 2008; Park and Kulej, 2009). It is also argued that UK government policies and strategies have been specifically aimed at improving the global market of higher education (DfES, 2003). As well as the potential financial gain for the individual by undertaking PGT study (Machin and Murphy, 2010; Higher Education Commission, 2012), there may have been a change in the perceived value of the UG degree within the employment market. Wolf (2002), cited by Wakeling (2005) suggests that one possible reason why the postgraduate population has increased in recent years is that "as the bachelor's degree becomes ubiquitous, its relative advantage in the labour market is diminishing" (cited by Wakeling, 2005, p. 506). Explanations for the increase in popularity of the fulltime mode include the growing number of international students who tend to study fulltime, the current harsh economic climate resulting in people investing in education (Putman, 1995) and less people studying part-time mode due to inflexibility at work or employers unable to contribute to the fees (e.g. Higher Education Commission, 2012; Morgan, 2013).

Although extensive research has been undertaken in the field of the student experience and learning and teaching at undergraduate level (for example Thomas *et al.*, 2002; Race, 2010; Morgan, 2012), research in the area of PGT study is limited (especially in STEM related topics), and tends to focus on evaluating the student's experience at the end of their course. For example, the Higher Education Academy (HEA), who is at the forefront in investigating the Postgraduate (PG) student experience, explores a PGT student's experience through their annual "end of course" Postgraduate Taught and Research Experience Surveys.

Funding opportunities provided by the HEA has resulted in research projects looking at intentions and transition experiences of new PGT students being explored. For example, in 2008, "Widening participation to postgraduate study: decisions, deterrents and creating success", led by Professor Mary Stuart, was published (Stuart *et al.*, 2008). The research was quantitative and qualitative in nature and explored the intentions to study at PG level of final year undergraduate students at two Post-1992 universities across all disciplines. In the same year, Tobbell and colleagues published their report on "Exploring practice and participation in transition to postgraduate social science study". Their research was qualitative, undertaken across five institutions and involved 39 student and staff participants (Tobbell *et al.*, 2008).

Wakeling, a key commentator in postgraduate study, has undertaken wide-ranging research exploring the social barriers of engaging and succeeding in postgraduate study as well as research into widening participation at postgraduate research level (Wakeling, 2005, 2009; Wakeling and Kyriacou, 2010). His latest research report co-authored with Hampden-Thompson and funded by the HEA is entitled "Transitions to higher degrees across the UK" (Wakeling and Hampden-Thompson, 2013). It is the first comprehensive research undertaken examining PG growth within the UK. Machin has been exploring the financial implications of PG-level study for all stakeholders (Machin and Murphy, 2010).

Although there is an increasing body of literature, there is still a paucity of research looking at different aspects of the postgraduate student experience such as understanding PGT student expectations across different groups of students; the impact of prior learning experiences and other barriers affecting success at PGT level; and funding issues such as the of lack of funding opportunities for the potential student. This resulted in the Higher Education Commission recently describing postgraduate study as the "forgotten part of the sector" (Higher Education Commission, 2012, p. 17). Organisations such as the 1994 Group, the NUS and the Russell Group have called for further research into PGT study.

At undergraduate level, evidence shows that supporting the transition into study in the academic and non-academic spheres, and understanding the study expectations of students can impact on the resilience and success of the student (e.g. Morgan, 2013; Thomas, 2012). Although it is intuitive to suggest that the same could be applicable at PGT level, there is extremely limited national or international research to draw on to confirm that this is the case.

#### Literature on first-generation higher education participation

Literature in the field strongly suggests that family background can impact on undergraduate students' ability to engage and succeed in their studies but it is not known the extent to which this is the case at postgraduate level because as Wakeling and Kyriacou states "there is very little research which examines this issue directly" (Wakeling and Kyriacou, 2010, p. 76). At undergraduate level, the lack of family experience of higher education is regarded as a barrier to education. Feinstein *et al.* found that the most important "distal" influences on children's attainments are parental education (Feinstein *et al.*, 2004, p. 1) while Thomas and Quinn suggest that having parents who have been successful in higher education is the most significant factor in aspiration and success in undergraduate higher education participation (Thomas and Quinn, 2006). It is argued that higher social classes and students of parents who have been exposed to higher level education will have the social, cultural and economic capital to succeed in HE (e.g. Bourdieu, 1977, 1984; Stuart, 2006; Stuart *et al.*, 2008; Morgan, 2013)

The limited research available looking at generational status at postgraduate taught and research level suggests that barriers do continue to exist at postgraduate level study with those who have family with previous higher education experience being more likely to intend to undertake postgraduate study (Stuart *et al.*, 2008; Wakeling, 2009). The regression analyses in the Stuart *et al.* study revealed that family higher education experience was a high predictor of a postgraduate qualification being undertaken at both the universities across all disciplines (Stuart *et al.*, 2008).

Due to the paucity of research, the Faculty was unable to draw on existing PGT expectation literature to shape their approach to supporting the entry transition of their PGT students. As a result, they undertook their own research looking at STEM PGT student prior learning experiences and expectations of studying at PGT level. It is from this research that the findings for first and second-generation students are reported.

#### Aims and objectives of the research project

Previous research had been undertaken in the Faculty of Engineering at the HEI in question. The research was repeated when the Faculty merged with two others in 2011 to create the Faculty of Science, Engineering and Computing (SEC). The previous research had generated discussion and interest within the Faculty and university so

the research was repeated systematically across the schools within the faculty in September 2012/2013 with the new PGT cohort.

The aims of the research were threefold. It wanted to:

- (1) Explore aspects of the previous learning experiences of new PGT students in an attempt to determine whether the approach had shaped their learning expectations and experience at postgraduate level.
- (2) Investigate the expectations of new PGT students starting their postgraduate level study within the Faculty.
- (3) Identify any particular issues that could impact on successful engagement.

The objectives were to use the findings to help shape practical strategies and initiatives within the faculty to improve PGT student experience across the student lifecycle. This research area is new so there is no external comparable research and although this was a relatively small research project, as the area has not been investigated in any great depth nationally or internationally, the findings can usefully contribute to the growing literature and understanding of PGT student prior learning experiences and expectations.

#### Methodology

Broadly speaking, postgraduate qualifications at present can be classified into two principal groups: those that are substantially taught; and those with a significant research component (Smith *et al.*, 2010). The respondents participating in the study were all undertaking Masters by Coursework qualifications which fall within the "taught" category.

The questions in the survey were developed as result of the findings from the previous surveys and the limited literature available, as well as through feedback from key staff and a group of PGT faculty course representatives. The questionnaire included closed (e.g. those using a five-point Likert-type scale) and open ended questions. The questionnaire went before the Faculty' Ethics Committee. It was completed during the orientation period in September 2012. Students were informed about the purpose of the survey in the general welcome session and were given the opportunity to complete it during their School-specific sessions. The questionnaire was voluntary and anonymous, and was distributed as hard copy to maximise completion rates.

The questionnaire had two aims. First, it was designed to collect data to contribute to the understanding and improvement of the postgraduate experience by the Faculty, and second, it would act as a personal development activity for new PGT entrants, as they were required to reflect on how they had previously learnt, and how they wanted to or expected to learn at postgraduate level. Students were encouraged to complete the survey through incentives of a prize draw to win Amazon vouchers, with 50 vouchers worth  $\pounds 20$  allocated across the eight schools. Students completed a separate identification sheet and the prize draw took place within the school-specific session.

#### Data analysis

The data collected was entered into the Statistical Package for the Social Sciences (SPSS) and a range of tests were run on the data. Across the schools that delivered PGT courses (seven out of eight), 233 questionnaires were completed. This accounted for

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approximately 90 per cent of those who attended the main "Welcome and orientation" programme in September 2012 and for 77 per cent of the September cohort intake. Due to the sample size, the results were not weighted to take into account the non-participation bias of the small percentage that did not complete the survey.

## The findings

The findings reported in this paper provide baseline data of prior feedback experiences and the expectations of first and second-generation students studying at PGT level in a Post-1992 university. It was essential to gain an understanding of the similarities and differences between the generational groups as well as other key characteristics such as domiciled status, age, gender and entry route. The findings below report the notable findings of first and second-generation students and some non-significant findings to illustrate the similarities across the different student characteristics. The key findings will be briefly discussed later in the paper.

# The sample composition

Of the respondents who had declared their generational status, 46.8 per cent (108) stated that they were first-generation students and 53.2 per cent (123) second-generation. The gender and domiciled status of the sample reflected the Faculty's overall composition. Of the three domiciled groups, first-generation respondents were least represented amonst the EU-domiciled students. First-generation respondents accounted for 50.9 per cent (55) of UK-domiciled respondents, 40.5 per cent (15) of EU-domiciled and 46.8 per cent (42) of those classified as having Non-EU status.

Of the respondents, 42.7 per cent (99) were female and 57.3 per cent (133) male. When gender is analysed with generational status, first-generation female participation is lower than the whole sample percentage with 39.8 per cent (43) and second-generation female participation is higher with 44.7 per cent (55) (see Figure 1). Male participation was higher among the first-generation group with 60.2 per cent (65) compared to the second with 55.3 per cent (68).

There was little difference in the second-generation sample in terms of gender and domiciled status. However, there was a noticeable gender difference between UK and



EU domiciled first-generation respondents with less UK females and EU males present in the sample. Of the first-generation male respondents, 57.8 per cent (37) were UK-domiciled, 9.4 per cent (6) EU-domiciled and 32.8 per cent (21) Non-EU-domiciled. The figures for female first-generation respondents were 41.9 per cent (18) UK-domiciled, 20.9 per cent (9) EU-domiciled and 37.2 per cent (16) Non-EU-domiciled.

Over two-thirds of the sample classified themselves as belonging to two ethnic groups: Asian (33.2 per cent) and White (38.8 per cent). When ethnicity and generational status were examined within each ethnic group, there were more first-generation Asian respondents (39.8 per cent, 43) than second-generation Asians (27.6 per cent, 34). Of those respondents who classified themselves as White, there were more second-generation White respondents (42.3 per cent, 52) than first-generation (34.3 per cent, 37). In the sample, there were noticeably more second-generation respondents in the 18-24 year-old age group than first-generation but slightly more first-generation respondents than second in the 30-35 year-old age group (see Table I).

#### Starting university

Entry route into PGT study. Of the sample, 39.5 per cent (92) of the respondents were coming from work into study, 36.5 per cent (85) straight from university, 16.3 per cent (38) from having taken a year out and 7.7 per cent (18) classified themselves as "other". There was little generational difference of those entering PGT study from the "year out" and "other" categories. However, for first-generation students, the most popular entry routes was from "work" and for second-generation respondents it was from "university" with 41.7 per cent (50).

Of the sample, 7.3 per cent (17) of the respondents' last place of study was at a college of further education rather than university and this comprised of 13 first-generation and 4 second-generation respondents. Of the UK domiciled first-generation respondents, 23.3 per cent (ten) had previously studied at either an EU or Non-EU university compared to 36.2 per cent (17) of second-generation respondents. Fractionally more UK-domiciled first-generation respondents had previously studied at an elite UK (Russell Group) institution with 11.6 per cent (five) compared to 10.6 per cent (five) of second-generation respondents.

Reasons for undertaking a postgraduate qualification and choosing an institution. The primary reason cited by the sample for undertaking a postgraduate taught qualification was to "improve their knowledge of their subject" with 68.7 per cent (160). The second reason cited with 55.2 per cent (111) was to provide "more career options" and the third was to "improve their chances of getting a graduate job" with 26.5 per cent (43). Interestingly, here were no significant generational differences.

		First gener	ration	Second gene	eration
	Age	Per cent	п	Per cent	п
	18-24	33.0	35	43.3	52
	25-29	34.9	37	30.8	37
Table I.	30-35	18.9	20	13.3	16
Age groupings of	36-45	8.5	9	10.0	12
respondents	46 +	4.7	5	2.5	3

For both first and second-generation respondents, "course content" was the primary reason for choosing a university for PGT level study. The "cost of fees" was cited by both as the secondary reason but this was slightly more important for first-generation respondents. The third reason provided was the "university's teaching reputation". The "university's research reputation" was not deemed a significant factor for the first or second-generation PGT respondents, even when examined on a subject or domiciled basis.

*Fee-level importance when making postgraduate course choices and funding of postgraduate studies.* The issue of fee levels was important to all the respondents. Of the sample, 52.3 per cent (114) stated that the fee level was "very important" or "important" in their decision making process with 33.5 per cent being (73) unsure. There was little difference between the two generational groups in terms of fees being "very important" or "important" in their decision making process but fee levels "not being important or important at all" was more prevalent among the second-generation respondents (see Figure 2).

A large percentage of the sample, (41.2 per cent (96)) cited parental assistance as the primary method of funding their PGT study. Savings was the second most-cited method with 31.7 per cent (38) and salary in third place with 23.4 per cent (18). The common assumption that those coming straight from "university" are more likely to receive parental assistance was reflected in the sample findings. Of the respondents who stated that their parents were helping them fund their studies, 53.7 per cent (51) were coming straight from "university". However, 25.3 per cent (24) of those who were coming straight from "work" and for 13.7 per cent (13) who were coming from a "year out" were also receiving financial help from their parents.

When the relationship between generational status and the funding of fees was examined, a substantially higher percentage of the second-generation respondents were receiving support from parents (see Table II) and the younger the student, the more likely they were to receive support.



00 0		First gener	ration	Second gene	Second generation		
<i>LL</i> , <i>L</i>	Primary method	Per cent	п	Per cent	п		
	Overdraft	4.6	5	1.7	2		
	Loan	12.0	13	15.0	18		
	Parents/guardians	35.2	38	47.5	57		
176	Salary	13.0	14	11.7	14		
110	Spouse/partner	10.2	11	4.2	5		
	Savings	16.7	18	13.3	16		
Table II.	University scholarship	0.9	1	1.7	2		
Primary method of	Employer	_	_	1.7	2		
funding fees and	Sponsorship	4.6	5	1.7	2		
generational status	Other	2.8	3	0.8	1		

When generational status, gender and funding variables are examined, the picture is further complicated. Of the first-generation female sample, 41.9 per cent (18) stated that they were getting help with their fees from parents compared to 30.8 per cent (20) of first-generation males.

For first and second-generation-females, approximately two fifths were receiving parental help. However, within the second-generation group, parental assistance was substantially higher than for first-generation males at 53 per cent (35). Parental funding for females, regardless of generation status, appeared to be similar but for males, a second-generation student was more likely to receive parental funding than their first-generation counterparts. There were no significant generational or gender differences when examining the respondents' intention to work during their studies.

#### Prior study experiences

*Respondents' understanding of the term "feedback" and their feedback preference.* Respondents were asked what they understood by the term "feedback". Generally, most of the respondents said they understood what the term feedback meant. Only a small handful provided confusing answers and of these, there was no correlation between the responses given and domiciled status (for example, not understanding the question) and generational status.

"Paper feedback" was cited as the most common method of receiving feedback in the respondents' previous studies with 77.1 per cent (182). This was followed closely by "face-to-face feedback" with 71.3 per cent (77) and 28.4 per cent (67) citing "e-mail" as a method utilised. Second-generation respondents reported a slightly higher level of receiving feedback via "e-mail" and the "intranet". There were no generational differences of respondents in terms of previous feedback preference or why they had approached tutors to discuss feedback in their previous institution of study.

The reasons cited by the respondents for not approaching their tutors included embarrassment; that they got the grade they expected and they did not think about asking for feedback. Of the first-generation respondents, 25.9 per cent (7) compared to 45.2 per cent (14) of those who were second-generation stated that they did not approach their tutor as they "did not think of asking for feedback on the feedback". Of the first-generation respondents, 85.2 per cent (23) stated that they would not approach their tutor if they got the grade they expected compared to only 53.1 per cent (17) of second-generation respondents. First-generation students were generally less likely to seek feedback of any kind.

# Current learning expectations

*Quality of study*. Respondents were asked to indicate the extent to which they agreed or disagreed with a range of statements (see Table III). In Table III, the "strongly agreed" and "agreed" responses have been combined to determine a level of consensus. First-generation respondents had higher expectations in terms of the quality of learning and teaching they expected, how they felt they should be treated, and in receiving value for money at PGT level compared to second-generation respondents.

Anxiety levels entering university as a postgraduate student. Respondents were asked to rate their overall anxiety level in starting PGT study. The rate for the sample group was quite high with 70.2 per cent (163) of respondents stating that they were "anxious or very anxious" (see Figure 3).

Respondents were asked to rate how they felt about a number of aspects related to starting university at PGT level study. In this question, the options available were "not anxious", "slightly anxious", "anxious" and "very anxious" to ascertain more accurately their level of anxiety.

The "anxious and very anxious" responses were the critical responses so were combined (see Table IV). "Coping with the standard of work" was the primary concern of the respondents. For 28.5 per cent (61) "coping with the travelling to university" and for 39.7 per cent (85) "managing their money" made them feel "anxious and very anxious". There were no significant generational differences.

A substantial percentage of the sample commuted more than five miles to university but a slightly higher percentage of first-generation respondents than second-generation commuted more than 16 miles (see Table V).

Quality statements	First generat Per cent	St ion n	rongly agr Secon generat Per cent	ree/agi id tion <i>n</i>	ree Samp respon Per cent	le ses n
My expectations in terms of the quality of delivery and service at postgraduate level will be higher than at undergraduate level	94.5	102	85.7	102	90.1	209
Should be treated in a manner that reflects my academic achievement I expect to learn in a more independent manner I will be less tolerant of poor quality learning and the achievement back level then at undergraduate	71.1 77.6	76 83	59.3 77.3	70 92	64.4 76.2	148 94
level	65.7	69	64.4	76	64.5	147
than at undergraduate level	74.1	80	68.9	82	70.7	164
postgraduate level	86.0	92	79.8	95	83.1	192
postgraduate level	21.3	23	21.2	25	21.6	50



		Not anxious at all Per cent <i>n</i>		Slightly anxious Per cent <i>n</i>		Anxious Per cent $n$		Very anxious Per cent <i>n</i>	
<b>Table IV.</b> Level of anxiety for aspects of PGT level study	Coping with the standard of work Getting involved in uni life Making friends Managing my money Finding accommodation Looking after myself Coping with the travelling to university	9.3 53.1 54.2 33.6 75.2 70.8 54.7	20 45 115 72 158 150 117	37.0 22.1 19.3 26.6 3.8 12.7 16.8	80 47 41 57 8 27 36	39.8 21.1 20.8 25.2 12.9 13.7 21.5	86 45 44 54 27 29 46	13.9 3.8 5.7 14.5 8.1 2.8 7.0	30 8 12 31 17 6 15

	Distance	First gener	ation	Second generation		
		Per cent	п	Per cent	п	
	Under 5 miles	25.5	26	38.3	46	
	6-15 miles	35.3	36	32.5	39	
e V.	16-25 miles	14.7	15	13.3	16	
nce travelled to	26-35 miles	10.8	11	5.8	7	
ersity	Over 35 miles	13.7	14	10.0	12	

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> All respondents were asked to suggest specific help or information that would help reduce the anxieties in their studies. The respondents' suggestions fell into four broad themes: learning and teaching, communication, information and support with learning and teaching being the most populated theme as demonstrated in Table VI below. Again, there were no generational differences in terms of support wanted at PGT level.

> Preferred feedback method and timing at PGT level. For each feedback method, respondents were asked to rate their preference of receiving feedback at PGT level by selecting either "most preferred method", "an acceptable method" or "least preferred method". The "most acceptable method" provided by the sample was "face-to-face" followed by "paper" then "e-mail". "Audio" was the least most preferred method.

Theme	Support	Study expectations of
Learning and teaching	Good lecturers	PGT students
	Access to all lecture notes and slides	
	Access to published journals	
	Copies of lecture notes	1 = 0
	Availability to lecturers	179
	Face-to-face time with lecturers	
	Face-to-face feedback	
	Full reading list	
	Module information before the course starts	
	Good supervisor for the project	
	Light same lating water	
	Hard copy lecture notes	
	Get study information well in advance of starting	
	Short tests to show development and progress	
Communication	Clear communication from all staff	
Communication	Enter Communication nom an Stan	
	Principle and about expectations	
	Assignment requirements	
Information	Direction on where to find any information	
mormation	Information earlier on all aspects of study	
	Information on how the academic year works	
Support	Advice on what support is available	
Support	Good one to one support	
	Support on how to study in a different language	
	Assistance in finding work during studies and after	Table VI
	Help with language support	Support requirements

However, when the findings are analysed on a generational and gender basis, there were a number of findings worth noting (see Table VII). "Face-to-face" feedback was the most popular method cited by male and female first-generation and second-generation male respondents but not for second-generation females. "Paper" feedback was the lowest "most preferred" preference by second-generation males.

Of the sample, 80.7 per cent (188) stated that they expected to get their feedback "within two weeks" of handing in their assignment, 18.9 per cent (44) "within four weeks" and 0.4 per cent (1) "within six weeks". Within in each generational group, 83.7

		Μ	ale			Fen	nale		
	First generati	on	Secon	d ion	First generati	on	Secon generati	d ion	
Feedback preference	Per cent	п	Per cent	п	Per cent	п	Per cent	п	
Paper	50.8	30	34.8	23	47.4	18	50.9	27	Table VII
E-mail	44.3	27	39.3	24	35.9	14	50.0	27	Feedback preference at
Intranet	23.2	13	21.1	12	13.9	5	18	9	PGT level study by
Audio	6.7	4	1.7	1	_	_	4.1	2	generational and gender
Face-to-face	75.0	48	73.8	13	68.3	28	48.1	26	status

per cent (103) of second-generation and 77.8 per cent (84) of first-generation respondents expected their feedback within two weeks.

Perceived study strengths of respondents. Respondents were asked to rate their skills in terms of "very strong", "strong", "weak" or "very weak". In the overall sample, the majority of respondents stated that their skills were "strong". When the data was examined on a generational basis, interesting patterns emerged. The second-generation group responses are significantly higher than those of the first-generation in terms of perceived study skill strengths (see Table VIII). Only in the "quick assimilation of ideas" and "study skill" statements are first-generation responses higher.

However, when the data is examined using generational and gender variables, and focuses on the "very strong" responses only, a number of notable differences emerge.

- First-generation respondents are generally less likely to say their skills are "very strong" compared to second-generation respondents.
- Women, regardless of generation status, are less likely to say their skills are "very strong" compared to men.
- The areas where first and second-generation women say they have "very strong" skills, and which are higher than the men, are in "study skills" and "ability to organise".
- Second-generation women appear more confident than first-generation women in terms of the strength of their "knowledge" and "assimilation of ideas".

#### Summary

The data showed noticeable generational similarities and differences. Generational status did not appear to impact on reasons for undertaking a PGT degree, choice of university, fee level, understanding feedback or approaching a tutor for feedback, anxiety levels or study support. However, it did appear to impact on the ability to fund PGT study with first and second-generation females obtaining a similar level of parental help but first-generation males being the least likely to obtain parental financial assistance.

First-generation students generally had higher expectations regarding the level of service received. A larger percentage of second-generation students expected feedback within two weeks compared to their first-generation counterparts. The sample composition had noticeably more second-generation respondents in the 18-24 year old age and less in the 30-35 year old age group in comparison to first-generation students. In terms of perceived study strengths, first-generation students were more likely than

		First generati Per cent	on n	Secon generat Per cent	id ion <i>n</i>	Samp respons Per cent	le ses n
	Quick assimilation of ideas Ability to organise my study independently	83.0 58.9	98 94	71.9 81.7	104 98	83.8 84.3	192 193
Table VIII.	My study skills	76.2	90	66.7	94	81.9	186
Generational "very	Knowledge of subject studying at university	65.1	82	84.0	100	80.6	183
strong" and "strong"	Literacy skills	58.9	79	75.2	91	73.9	170
responses for skills	Numeracy skills	58.9	87	86.0	104	83.9	193

the second-generation respondents to say they did not have "very strong" skills and gender exacerbated this perception with females from both generational groups less likely to state they had "very strong" skills coming into PGT study.

# Discussion

The findings above highlight some important issues that merit further discussion.

## Funding

The sample, which was reflective of the Faculty's PGT student body in terms of gender, domiciled status and age, showed that second-generation participation was greater than first-generation thus supporting previous research suggesting that generational status is a potential barrier to studying at PGT level (e.g. Stuart *et al.*, 2008). Researchers (Allen *et al.*, 2006; Foskett *et al.*, 2006; Stuart *et al.*, 2008) suggest that the costs of fees are a major factor in not progressing onto PGT study. There is an assumption across the sector, albeit anecdotal, that when a student enters PGT study that they will be self-reliant and fund their own studies through bank loans or savings. However, Bank Development loans have not been available for many years in the UK, and a recent undergraduate, whether going into PGT study straight from university or from work, is unlikely to have accrued substantial savings to help them with fees and living costs. There is also a perception that when a student studies at PGT level parental involvement substantially reduces or becomes non-existent. However, what these findings demonstrate is that parental involvement is substantially continuing at PGT level and generational status is a significant variable.

The lack of a funding model in the UK is a potential problem for applicants and institutions wishing to expand their PGT numbers (e.g. Boorman and Ramsden, 2009; Universities UK, 2013). A potential pitfall of the unavailability of a funding model may be that the academic capability of the PGT applicant becomes an important driver in deciding whether the applicant decides to undertake a PGT qualification or indeed whether an institution offers them a place. The applicant with weak entry qualifications may decide that the risk of withdrawal or non-completion is too great to justify the expenditure especially in a harsh economic climate. For the institution that may traditionally recruit students with low or diverse entry qualifications, its ability to continue to attract students in the current economic climate may be a challenge.

#### Study expectations

At undergraduate level, it is recognised that managing students' study expectations can not only improve persistence and success but also increase satisfaction (e.g. Morgan, 2013; Thomas, 2012). Intuition would suggest that the same is applicable at PGT level but in the absence of data, this cannot be ratified. In this study, the majority of respondents' expected a higher quality experience than at undergraduate level but expectations were generally higher among first-generation students. It is unclear as to why this is the case but conjecture could include that first-generation students do not have the guidance of parents who have university experience to help manage their expectation, and as they are less likely to receive parental funding compared to their second-generation counterparts, this impacts on their attitude regarding expecting a high quality student experience and "value for money".

Although anxiety levels were similar between the generational groups, settling into their studies and commuting were of greatest concern to the students and these two aspects are known reasons for student withdrawal at undergraduate level (Peelo and Wareham, 2002; Yorke and Longden, 2004). Commuting was higher among first-generation students. Commuting is known to increase stress levels and contribute to withdrawal at undergraduate level. For example, a recent report entitled Back on Course, which was funded by the Higher Education Funding Council for England, found that 48 per cent of early leavers at undergraduate level from across 70 institutions were commuting students (Stephens and Peters, 2012). Research looking at undergraduate commuter students suggests that they may struggle to integrate into university social support systems and to develop a "sense of belonging" with their institution due to the time taken up and pressure of travelling (e.g. Tinto, 1993; Thomas, 2012; Morgan, 2013). It is argued that this can affect student persistence and degree attainment (Astin, 1993) as well as the overall satisfaction with their university experience (Stephens and Peters, 2012). As student fees at all levels of study increase, expectations of all students at PGT level are likely to continue to rise. Students' work, study and life experiences will shape their PGT study expectations so an institution understanding their student body's requirements, managing their expectations, and encouraging colleagues and students to recognise that they are partners in the learning process, will be more critical than ever.

#### Perceived skill base

Evidence suggests that low skill base levels for those entering higher education at undergraduate level can increase transition difficulties (Richardson, 2003) and students' expectations may be distorted by their previous experience (Bamber and Tett, 2000). The findings in this research suggest that this may be applicable at PGT level study. The findings show that for first-generation respondents', their perception of the strength of their skill base at PGT level was lower than those who were second-generation students. It is unclear as to why this is the case but it could partly be explained by the fact that the largest number of first-generation respondents were coming straight from work into PGT study compared to second-generation students who were coming mainly from university. Being out of the study environment can reduce an individual's confidence especially regarding their academic skill base.

# Conclusion

This study proposes that the prior learning experiences but especially the expectations of PGT students are complex and shaped by the identities of each individual. Generational status is clearly an important characteristic at PGT level and its impact on resilience and retention requires further exploration, as does that of other student characteristics including gender, domiciled status, ethnicity and age. This research focused on STEM subjects but it is important to ascertain whether the findings are STEM discipline related or PGT in general. While many recognise that the undergraduate student body cannot be treated as a homogenous group, so also does it need to be understood that postgraduate (taught) students merit ongoing and thoughtful recognition of their multiple perspectives. With the recent changes in the UK HE landscape, the small scale research which generated this paper, does offer important contributions to debate on the future of postgraduate taught study in the UK.

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