Motivations to go into teaching: A longitudinal perspective of trainees' career satisfaction and commitment to teaching

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Motivations to go into teaching: A longitudinal perspective of trainees' career satisfaction and commitment to teaching

by

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Abstract

There is currently a global shortage of qualified teachers. Education systems in many countries are struggling to attract and retain high quality candidates for teaching despite multitudes of initiatives and huge financial investments. This thesis identifies and proposes key determinants of individuals' decisions or motivations for choosing teaching as a career or not and their long-term commitment to teaching. Understanding this will help to identify appropriate strategies to attract and retain teachers. The thesis begins with a systematic review of international evidence focused on motivations of students, in-service and pre-service teachers, across the world to understand individual as well as cultural and political factors influencing their career decisions. These studies are invariably cross-sectional presenting individuals' decisions at one time point. My thesis extends this with a longitudinal national study of one-year postgraduate trainee teacher trainees' motivations, perceptions, career satisfaction and their commitment to teaching. Two surveys were carried out – one at the beginning of the training (n=645) and a follow-up survey at the end of the training (n=761). The survey also looked at the impact of the Covid-19 pandemic on trainees' career decisions.

The systematic review identified 517 studies of which 212 were included in the synthesis. These studies highlighted three main motivating factors - intrinsic, altruistic and extrinsic. There are subtle differences between groups. Across all cultures and phase of education, more women choose teaching than men, and women are somewhat more likely to report being motivated by intrinsic and altruistic reasons, while men are more likely to influenced

by extrinsic factors. Across all cultures, men are reportedly more strongly influenced by social norms and expectations and are less likely to choose primary and early years teaching.

The review highlights major limitations in research on this topic. The lack of comparison group is one of them. Only a handful of studies compared the career motivations and perceptions of those who have considered teaching and those who have not. The reasons given by current and prospective teachers for entering teaching are not necessarily the same as those that draw others into teaching. Therefore, policies based on these flawed studies might only be attracting those who are already persuaded.

Almost all the studies in the review are correlational, and few controlled for demographic factors. These studies cannot establish the direction of causation. We cannot be sure if teachers' reported motivations for going into teaching are post hoc justifications for their decisions. Few would admit to entering teaching as a last resort. Most studies also did not include biographical factors. Those studies that did suggest that these are the strongest predictors of who are likely to go into teaching or not. Those who chose teaching are more likely to study generic subjects at university, have lower entry qualifications and have parents with lower parental occupational and educational levels. Most students would have made up their mind about their career decisions by the time they made their subject choice at university. Therefore, to increase the number of teachers in some shortage subjects, like maths and science, might require an approach that targets students before they make their subject choice at university. The review also found that

extrinsic factors were particularly important to men and those in STEM subjects. Policies to attract these under-represented groups might do well to emphasise the extrinsic value of teaching, such as, pay, job status and job satisfaction.

None of the studies in the review compared the motivations of people on different routes into training or between career changers and first career teachers. My primary research found that men and those on a university-led route are more attracted by the possibility of teaching abroad, while those on school-led route are more likely to cite job security as a reason for entering teaching.

The experience of teaching during the pandemic had also made some reassess their long-term plans. Trainees reported having limited classroom experience and were finding it difficult to get a teaching post. Despite this, the majority of trainees remained positive and aspired to be effective teachers and further develop themselves professionally. Interestingly, few of these trainees had considered leadership roles.

In general, trainee teachers appear to be very satisfied with teaching as a career choice, with most planning to stay in the profession in the long-term. Of the few who indicated that they wanted to leave, heavy workload associated with teaching was the key factor. There were also a few who said they might want to consider other career options in the long run. Initiatives to retain newly qualified teachers would need to consider how new teachers could be supported. The Early Career Framework and the Workload Strategy, clearly had minimal effect. A re-evaluation of these policies is urgently needed.

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Declaration/Statement of copyright

Declaration

This thesis was written while studying for a Doctorate in Education (EdD) with Durham University. The material contained in this thesis is the sole work of the author and has not previously been submitted for another degree at Durham University or any other institution.

Part of this thesis, the systematic review, has been published in a peer-reviewed journal. Below is the reference of the journal article:

See, B. H., Munthe, E., Ross, S. A., Hitt, L. & El Soufi, N. (2022). 'Who becomes a teacher and why?', *Review of Education*, 10 (3).

Statement of Copyright

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Finally, thank you to Jane. Your guidance and wisdom will never be forgotten.

SECTION A

INTRODUCTION AND LITERATURE REVIEW

A.1 Overview

This study is an examination of teacher motivation, their perceptions of teaching, and their career satisfaction and aspirations. What prompted this study were international and national reports of increasing teacher shortages and governmental focus on recruitment of high quality teachers. Governments across the world look to education systems as the way in which to drive social mobility and economic development. Having a good supply of teachers is the foundation of a strong education system, yet teacher shortages in some areas and subjects prevail. Many developed countries are experiencing a shortage of teachers, particularly in some shortage subjects and hard-to-staff geographical locations (Eurydice, 2018; 2021). This impacts the delivery of high quality teaching and learning (Eurydice, 2018; 2021).

It is therefore unsurprising that teacher motivations and perceptions of the profession have become a focus point. Most research in this field has focused on self-reported motivations, perceptions, and satisfaction of those who have chosen to teach: pre-service and in-service teachers. Although this sheds some light on what attracts people to the profession, and some of the challenges which make it less attractive to those currently teaching, it does not tell us how to attract those who have considered teaching but have chosen not to. For recruitment policies and initiatives to be successful, the first step is understanding not only why some individuals choose to teach, but why others do not.

In England, various policies and initiatives have been used to attract people to the profession, particularly to shortage areas and subjects. These have included bursaries and scholarships for shortage subjects, targeted advertising, payment incentives to teach and specific regional approaches. Many other countries have used similar initiatives to attract and retain teachers in shortage subjects and locations. There is little evidence that

these are effective (See et al., 2020). There is a need for robust evaluation of initiatives and more evidence in such areas to better shape future policy.

This thesis comprises two parts. The first part is a systematic review synthesizing the findings of some of the strongest empirical work on the factors influencing people's decisions to teach, or not. The second part is a longitudinal study comparing the motivations, perceptions and career satisfaction of trainee teachers in England at the beginning and end of their training to see if levels of career satisfaction have changed over the year. It also examines career commitment to teaching and the impact of Covid-19 on professional plans.

Chapter 1
STRUCTURE OF THE THESIS

The thesis has four sections. Section A introduces the study over three chapters. Chapter One outlines the structure of the thesis and Chapter Two provides a justification for the research. It sets out the aims and rationale for the study. Chapter Three is the literature review and explores challenges to teacher recruitment and retention, and what might support policies to meet these. It focuses on key factors relating to teacher motivation and perceptions of the profession.

Section B describes the methods of data collection and analysis used in the study. It is divided into three chapters. Chapter Four outlines the methods of the systematic review. Chapter Five concerns the questionnaire surveys of trainee teachers. It discusses the recruitment of participants, sampling strategy, distribution of the questionnaire, and limitations. Chapter Six deals with how data collected from the questionnaire survey were analysed.

Section C consists of three chapters (Chapters 7 to 9). Chapter 7 presents the findings from the systematic review. Chapters 8 and 9 present the finding from the primary research.

Section D provides further discussion of the main findings of the study and the implications for future research. Recommendations for policy and practice are also discussed.

Chapter 2
INTRODUCTION

The initial inspiration for this thesis evolved from my professional interest and experience in this field. I currently work in initial teacher training, but the focus of this thesis was influenced by my previous work as a teacher and school leader in primary schools. Whilst working in schools I became interested in who chooses to teach and their motivations and perceptions of the profession, particularly with the background of failing recruitment initiatives, high attrition rates and government focus on both of these issues. Teachers are an incredibly large workforce and are the bedrock of a quality education system. Exploring teachers' reasons for choosing teaching, their satisfaction and planned commitment is therefore not only of professional interest, but important for wider society. There is the need to understand this, and so my professional interest aligns with clear gaps in the research which will be discussed below.

2.1 Rationale

Shortage of teachers is a worldwide concern, and recruitment and retention of teachers is an issue which many countries are facing. Headlines around the world over the last few decades have consistently reported teacher shortages and crisis in teacher supply. For example, the Guardian reported, "Schools crisis looms as posts remain unfilled" (McVeigh & Bright, 10 December, 2000). In the US, similar concerns for teacher supply were reported in the Washington Post, "Never seen it this bad: America faces catastrophic teacher shortage" (Natanson, 3 August, 2022). UNESCO (UNESCO, 4 October, 2022) and Euronews (Euronews, 2022) also sounded the alarm on the global teacher shortage crisis.

Teachers are important for the provision of an effective education system (See et al., 2020), making a difference to children's academic and lifelong outcomes (Chetty et al., 2014; Gerritsen, Plug & Webbink, 2016; Sibieta, 2018). Teacher shortages can therefore have significant repercussions on the life chances of children.

Arising from these concerns is a body of research that attempts to understand the causes of teacher supply, demand, and shortages. Some of these studies are discussed in the literature review . Shortages are often attributed to the relatively poor pay of teachers, poor career prospects, low social status and heavy workload in schools, which make teaching a less attractive career option (e.g., Aldeman, 2015; Sutcher et al., 2019).

This notion of teaching being an attractive career option compared to other occupations is important (See et al., 2020). During times of recession or periods of uncertainty, for example, the number of individuals who choose teaching as a career choice increases. This indicates that perceptions of teaching have an impact: when teaching is perceived as a more favourable career than others, recruitment increases – and vice versa. But, very often, literature focuses only on those who have already chosen to teach, not always comparing findings with those who have not.

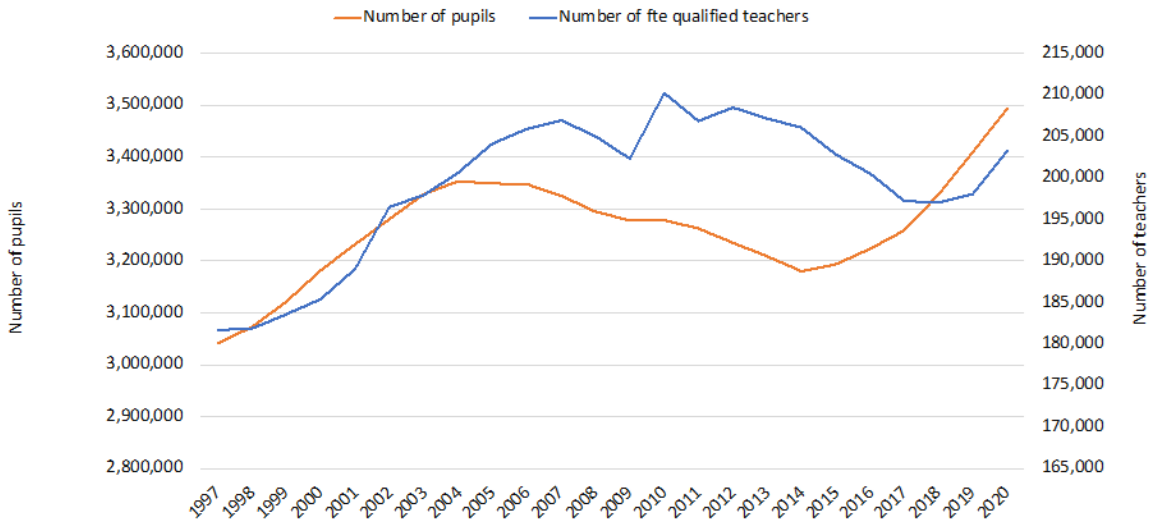
Understanding people's career motivations – why some choose to teach, and some do not - is an essential knowledge that is relevant to policy decisions. This is so recruitment initiatives can be carefully considered and scaffolded to not just target a population who are already interested in teaching, but also under-targeted and under-represented groups: those who are not interested in teaching. But, again, research into motivations of teachers focuses predominantly on those who have chosen to teach and thus a key group is missed.

Understanding both people's career motivations and their perceptions of teaching as a career from an international perspective is therefore relevant to policy decisions. Identifying important factors that drive individuals' choice of teaching needs to be addressed, as well as why some choose not to pursue it as a career.

In England specifically, the teacher shortage situation looks likely to get worse as the pupil population increases and more qualified teachers are leaving the profession. Firstly, the pupil: teacher ratio has increased over time from 17.6 in 2010/11 to 18.5 in 2021/22

(National Statistics, School Workforce Census, 2023). The rapid growth of pupils vis a vis that of teacher numbers, has not kept pace with the pupil population. While the number of secondary pupils has increased from 2014 onwards, teacher numbers did not increase until 2019, five years later (see Figure 1).

Figure 1: Number of FTE qualified teachers and pupils in state-funded secondary schools

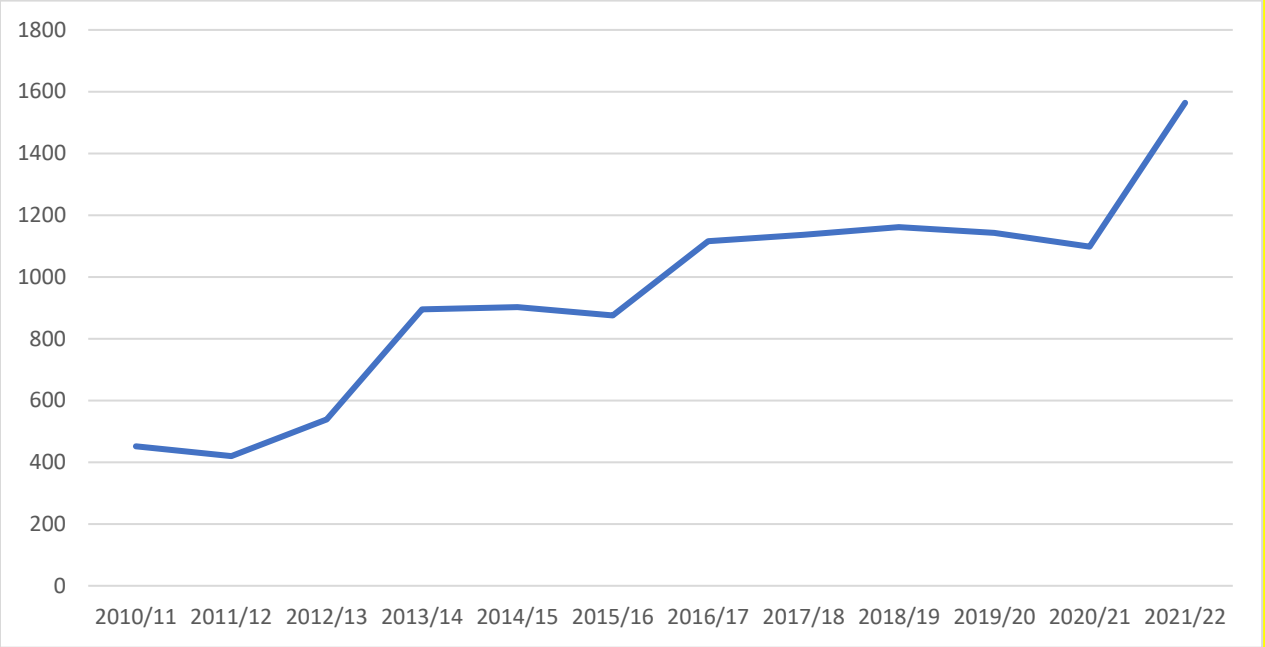


Source: National statistics, School workforce census, 2021

Although there are arguments to suggest that pupil vs teacher numbers are not always the best indicator of teacher shortage, as increasing rates could also be failure of government not responding quick enough to rising pupil numbers (See & Gorard, 2020), it does highlight an increasing demand for teachers.

Other data also demonstrates overall teacher shortage. The number of reported teacher vacancies has started to rise again (see Figure 2). The School Workforce Census data measures vacancies as of November, which is an unusual time to have a vacancy in school (Worth & Faulkner-Ellis, 2022).

Figure 2: Number of teacher vacancies



Source: National statistics, School Workforce Census, 2023.

The current shortage is even more problematic for some subjects and geographical regions. There are particular challenges in attracting and retaining men, STEM subject teachers, teachers in remote locations or inner-city schools, and ethnic minority groups

Teacher shortages are therefore a recurring, and current concern in England. As such, it demonstrates that current policy initiatives are not having the desired impact. Indeed, See et al.'s (2020) research clearly outlines the lack of robust evaluation of initiatives, (particularly financial incentives), and their inefficiencies in boosting recruitment. Perhaps teachers' pay, which is often highlighted in the media, is not the primary factor attracting people into teaching or indeed a factor in teacher attrition.

Understanding career motivations and perceptions of trainee teachers in England is therefore important and, although some studies (e.g., See, 2004) have been previously conducted, no national data was ever collected. This is an area which needs further exploration.

2.2 Aims of the study

The overarching purpose of this study is to understand why some people choose teaching as a career and why some do not.

This involves, first, a systematic review of empirical studies seeking to not only identify factors that drive individuals' choice of teaching, but their perceptions of the profession too. Importantly, it also explores research on under-represented groups and compares results across countries and regions. This is essential knowledge so that appropriate policy initiatives can be devised to address the current issue of teacher shortages internationally.

The first set of research questions is therefore:

Research question 1: Who chooses teaching as a career and why?

(a) What motivates people in different countries to go into teaching?
(b) How do people in different countries view teaching as a profession?
(c) Are there differences in motivational factors and perceptions of teaching between gender?

The study then considers the English context, looking specifically at postgraduate teacher trainees in England on a national scale. Despite the body of work on this topic in England, there has hitherto been no national study conducted in England and none which also examines the motivations of trainees across different training routes or trainee satisfaction.

The second set of questions is therefore:

Research question 2: Why do postgraduate teacher trainees in England choose teaching as a career?

(a) Who are the trainees?
(b) What are their motivations?
(c) Do their motivations to teach differ by age, gender, career choice and training routes?

(d) What are their perceptions of the teaching profession in England?
(e) Do their perceptions of teaching differ by age, gender, career choice and training routes?
(f) How far do trainees experience social dissuasion and are they satisfied with their decision to teach?
(g) Do levels of social dissuasion and career satisfaction differ by age, gender, career choice and choice of route?

This current study also investigates the levels of professional commitment and career intentions of trainee teachers at the end of a one-year postgraduate trainee teacher course, and their satisfaction with their choice of career. Previous studies have not considered the future career intentions of trainees in England nor levels of career satisfaction across the training year.

The third set of questions is therefore:

Research question 3: What are the levels of professional commitment and career development aspirations of teacher trainees in England?

(a) How likely are they to stay in teaching?
(b) How satisfied are they with their career choice at the end of their training?
(c) What are their career development aspirations?

Research questions 2 and 3 are answered via two national surveys of the one-year postgraduate teacher trainees in England.

2.3 Summary

This thesis combines both a systematic review and primary research in order to address the overarching question of why individuals choose to teach. The systematic review explores this from an international perspective, and the primary research investigates this in England, on a national scale.

The systematic review is unique in that it not only explores research on under-represented groups and compares results across countries and regions but includes literature that looks at those who have made the decision to teach, and those that have not: secondary school students, undergraduates, trainee teachers and in-service teachers.

The national survey of trainee teachers in England is the first study of this breath to be conducted. In addition to the significance of this for understanding career motivations and perceptions of trainee teachers – and for recruitments initiatives too – it makes a contribution in other ways as well. Previous studies have not considered the future career intentions of trainees in England nor levels of career satisfaction across the training year. It is assumed that trainees will go into teaching, and that they are happy with their decisions. This may not be the case. Some may have gone into teaching as a stopgap measure while waiting for something better to come along. Others may have taken up training for the bursaries or scholarships available with no intention of going into teaching. This information is missing in most previous studies.

Further, this study was conducted in the midst of the Covid-19 pandemic, which saw school closures and a move to online training for many providers. This unanticipated event may impact on the decisions of those training to teach. The study took advantage of this situation to understand the impact of the Covid-19 pandemic on teacher trainees' motivations to teach and their intention to stay on in teaching. This helps to understand the wider context of teacher shortages and retention, and whether and how this may influence long-term career goals and retention in the profession.

Finally, the survey also adds to the literature on the career motivations, perceptions and intentions of trainees via different routes, which were never explored in prior work. Exploring individuals' career satisfaction, career commitment and engagement is essential in understanding teacher retention.

Chapter 3
LITERATURE REVIEW

This chapter summarises literature and research findings on teacher shortages and concerns surrounding teacher supply and demand. It then explores the factors which are found to contribute to recruitment and retention.

This literature review does not attempt to cover an international perspective but is focused on the English context.

3.1 Defining teacher shortages

Teachers are essential for the development and sustainment of a strong and effective education system which makes a difference to the outcomes (both academic, economic, social and emotional) of the next generation (See et al., 2020; Chetty et al., 2014; Gerritsen, Plug & Webbink, 2016; Sibieta, 2018; Office for National Statistics, 2021). Yet, despite the necessity of teachers, the situation, as touched on in the previous section, continues and looks likely to get worse. Although efforts to improve the issue have been employed, failing recruitment and high attrition alongside pupil population increases mean the issue is not going away (Eurydice, 2018).

But teacher supply is complex and the term ‘teacher shortage’ is not universally understood to mean the same thing in different countries. In England, the common indicators of a shortage are class sizes, pupil:teacher ratios, number of teacher vacancies and teacher recruitment vs recruitment targets (See & Gorard, 2020). The average size of lower secondary classes in England is 24.7, but in China it is 34.3 and 32.9 in Singapore (OECD, 2018). Secondary class sizes in some schools in China can be as large as 50 to 60. In India and Pakistan, it is not uncommon to see class sizes as large as 60. But these countries do not report a shortage of teachers. In some countries, teachers need only to have a qualification a level higher than the classes they teach. In

the UK, US and some European countries, it is considered a shortage if teachers do not have a degree in subject they are teaching.

The issue of teacher shortages is therefore complex but can be defined as the inability of teacher supply to meet expected demand. Teacher shortages may refer to staffing problems which relate to teacher supply more generally (e.g. number of entrants and leavers) or specific shortages (e.g. lack of teachers in specific subjects and regions).

3.2 Teacher shortages in England

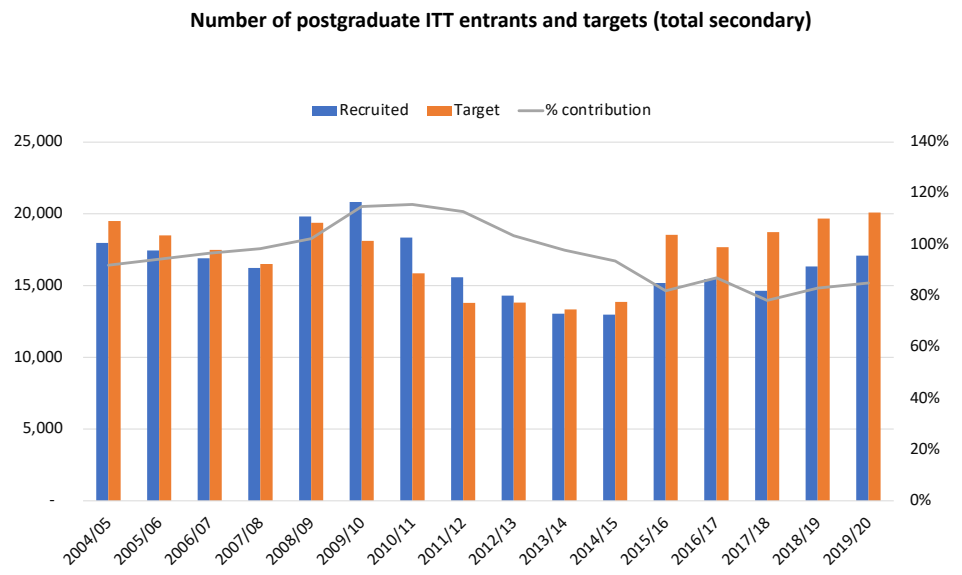
This section explores issues with recruitment and retention in England.

3.2.1 Issues with recruitment

The shortage of teachers in England is partly due to longstanding issues with recruitment. The number of teachers recruited into secondary subjects has been unable to meet the demand since 2012/2013 (see Figure 3). The most current data from the 2022/23 initial teacher training census (Department for Education [DfE], 2022) shows that recruitment to teacher training was below target for both secondary and primary: 41% below target for secondary teachers and 7% below target for primary teachers.

Shortages of teachers also affect some subjects and regions more than others. This is not just an issue in England but has been shown to be a common and also long-standing challenge in many developed countries too (Eurydice, 2014; Eurydice, 2018; Eurydice, 2021). Eurydice (2018) highlighted STEM subjects (science, technology, engineering and mathematics) as shortage subjects in many countries. The report also highlighted that location shortages were mentioned by half the countries which took part and included remoteness of regions or high cost of living and proportion of disadvantages pupils in certain regions. These concerns were reported as being an issue for both recruitment and retention.

Figure 3: Number of postgraduate ITT entrants and targets (total secondary)

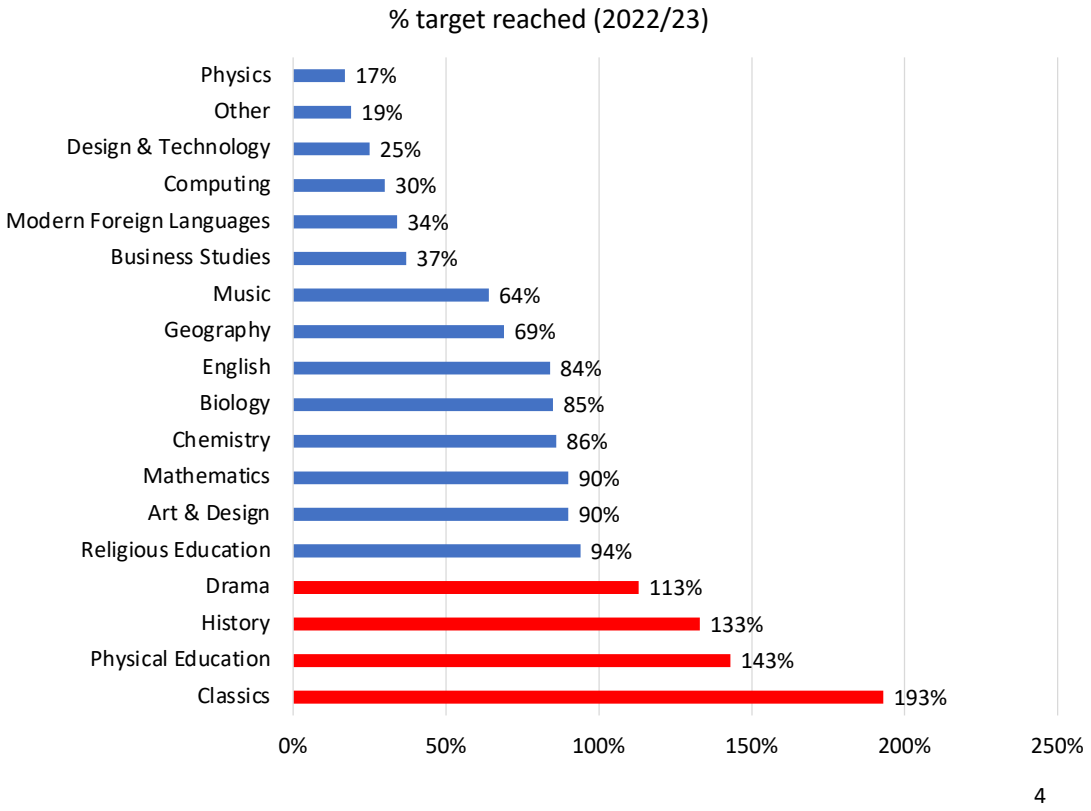


Source: DfE (2022). School Workforce Census

In England, recruitment to STEM subjects is consistently below target. In 2022/23, physics recruited only 17% of its target. Figure 4 shows that almost all subjects under-recruited in 2022/2023.

This has a knock-on effect with schools struggling to recruit teachers with a degree relevant to the subject they are teaching (Sibieta, 2020). This issue is also more pronounced in some regions too. For instance, the North-East, East of England and West Midlands are less likely to have teachers with a relevant degree in shortage subjects when compared to London. Only 37% of mathematics teachers and 17% of deprived schools outside London have a relevant degree compared to 51% and 52% in London.

Figure 4: Percentage of target reached (2022/23)



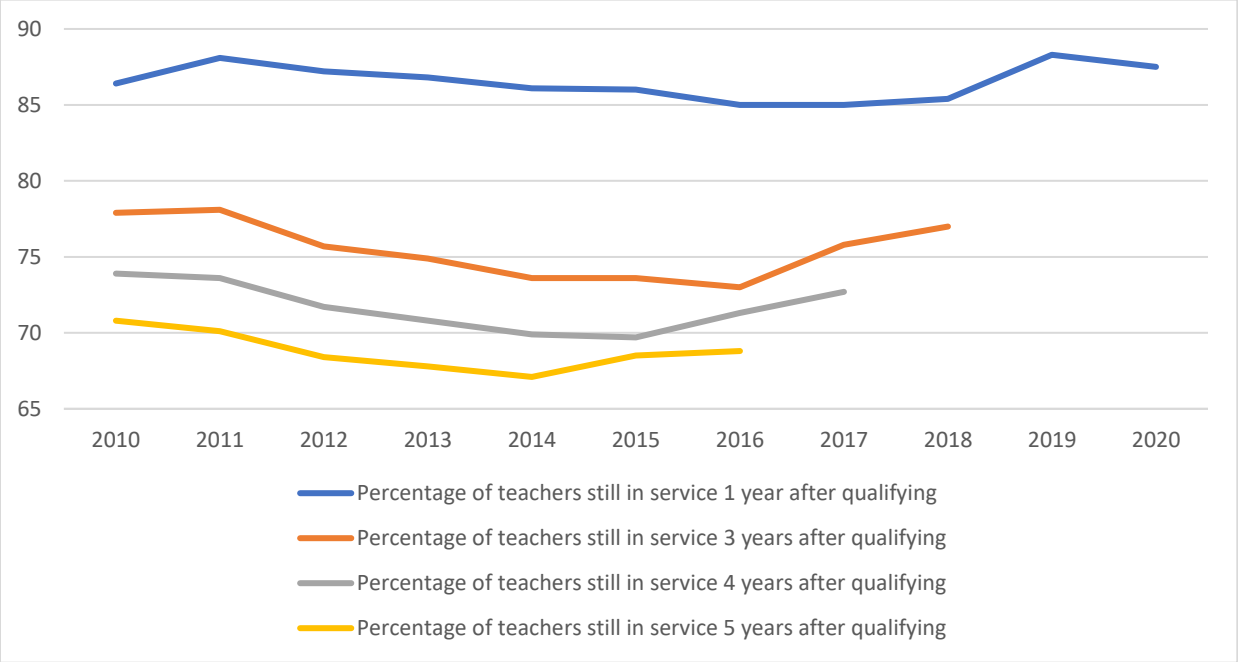
Source: DfE (2023) School Workforce Census.

3.2.1 Issues with retention

Teachers leaving the profession prematurely has been a long term concern in England. Reports regarding the loss of teachers, both during and after training, have been consistently highlighted in the media, government publications and research (Lortie, 1975; STRB, 2001; 2006; Howson, 2001; Ward, 2019). Whilst it is true that all professions experience turnover and career change, turnover in teaching is considered particularly high, especially in the first five years. Figure 5 shows that the percentage of teachers still in service after 5 years is generally between 65-70%. NFER (Worth, Hillary & Andrade, 2018) analysis comparing leaving rates for teachers with those of nurses and police officers showed that teachers are more likely to leave the profession.

Figure 5 also shows that retention rates have begun to increase since 2016 although the most recent data shows that the percentage of teachers still in service one year after qualifying has dipped. But looking at retention figures of all teachers does not show the complexities of retention, particularly for shortage subjects where retention is not improving. For instance, Sibieta's (2020) analysis shows that retention in mathematics and physics are lower than the general teaching population, with only 50% remaining in teacher five years after qualifying in.

Figure 5: Retention figures (2010 to 2020)

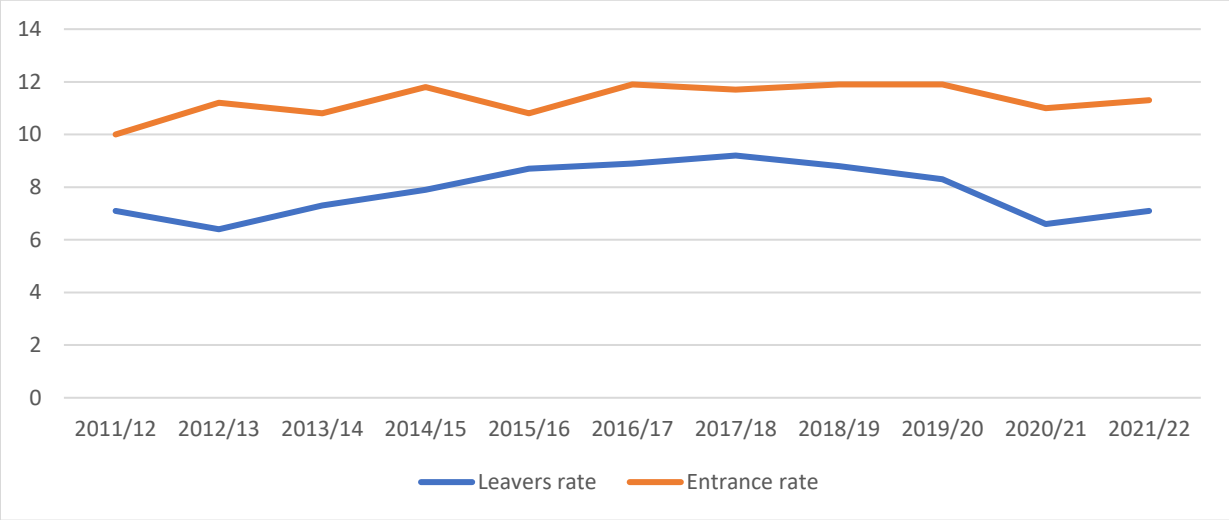


Source: DfE (2023) School Workforce Census.

When considering retention, it is necessary to look at the number of leavers in comparison to the number of entrants. Figure 6 shows that entrance rate is fairly flat from 2016/17 onwards, while rate of leavers has increased from 2015/16, the result of which is a net loss of teachers. There is a dramatic change in 2019/20 when both leavers and entrance rates fell, but the decline was steeper for leavers. This period was the beginning of the Covid-19 pandemic, which may have explained the fall in the number of leavers as alternative employment was hard to come by and the economy was in flux.

It is not unsurprising that during the Covid-19 pandemic, retention improved. Various factors may have played a part in this. The economic downturn as a result of the pandemic may have contributed to the slowdown of teachers leaving the profession. However, the worrying sign is that we are seeing more people leaving again as the rate of leavers increases from 2020/2021 onwards. Data suggests that retention is now likely to have returned to the level it was before the Covid-19 pandemic (Worth & Faulkner-Ellis, 2022; McLean, Worth & Faulkner-Ellis, 2023) This highlights that the improvement in retention was temporary based on extenuating circumstances.

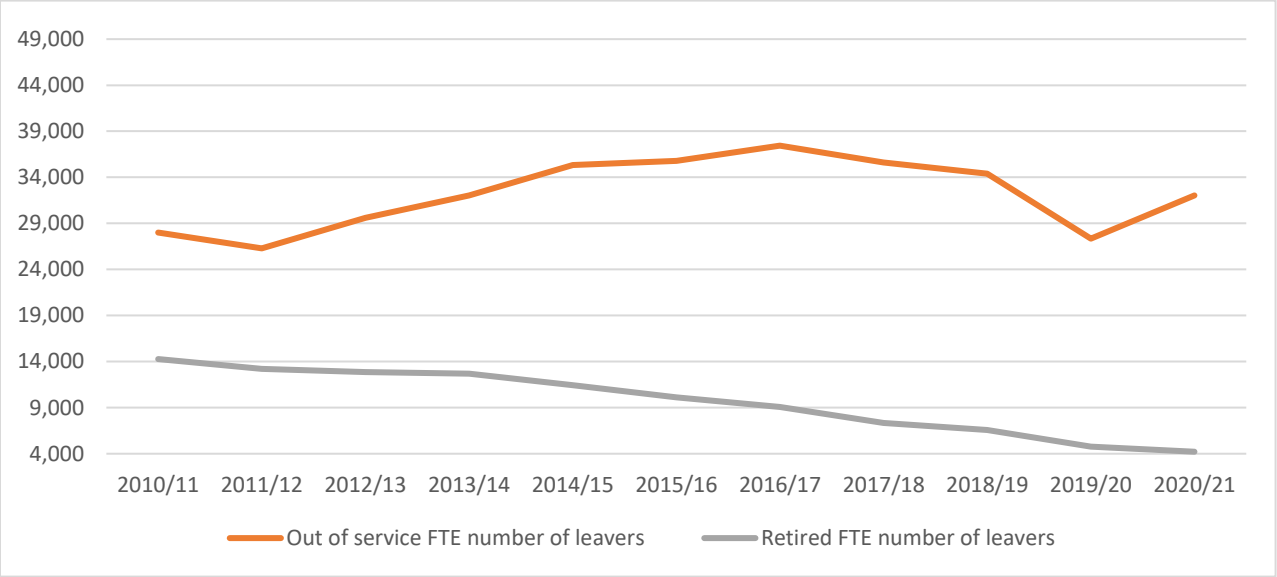
Figure 6: Entrance and leaver rates



Source: DfE (2023) School Workforce Census.

Out-of-service data refers to those who left teaching entirely, moved to other education sectors or taken career breaks, e.g., maternity leave or secondments outside of the school sector (out-of-service). Although out-of-service leavers had begun to decrease, there is a sharp increase from 2019/202. Numbers of teachers retiring cannot be controlled, but out-of-service teachers add to the teacher shortage.

Figure 7: Leavers: Out-of-service and retired



Source: DfE (2023) School Workforce Census.

Looking specifically at leadership retention, there are issues with levels of attrition of those in leadership posts, as well as aspirations of teachers, and subsequent recruitment, into leadership positions. The development of teachers into leaders is important to the field of education but data indicates problems relating to this. Firstly, general teacher attrition impacts the availability to teachers to develop into leaders. But, more importantly, the National Association for Head Teachers (NAHT, 2022) reveals that recent analysis of DfE data shows that almost half of teachers already in middle leadership positions (primary and secondary) leave the profession within 5 years. Not only does this leave gaps within the middle leadership strand to be filled, but potential senior leaders are also lost. Other data (NAHT, 2022) suggests that of those already in leadership positions (e.g., assistant heads and deputy heads), half do not aspire to headship. Retention across all roles within teaching (classroom teacher, leader and headteacher) appears problematic.

3.4 Teacher motivation

To understand teacher recruitment and retention, it is essential to understand people's motivation or decision to go into teaching or leave teaching. According to Eccles and Wigfield (2002), the word motivation stems from the Latin word 'movere', meaning 'to

move' and is therefore concerned with action. Motivation has been generally viewed as energy or drive that moves people to do something. But, given the complex nature of *what* drives someone to do something, and how this is understood, there is often disagreement in how it is defined (Dörnyei & Ushioda, 2011).

In a broad sense, motivation is defined by Dörnyei and Ushioda (2011) as what moves people to make choices, do something and persist at it. They identified two dimensions of motivation: direction and magnitude of human behaviour. Thus, motivation specifies the reason why someone chooses to do something, how long they are willing to continue with the activity itself and how hard they will pursue it. Similarly, Schunk, Meece and Pintrich (2014) define it as a process whereby goals are both instigated and sustained. However, as Dörnyei and Ushioda (2011), note, there has been a lot of debate and disagreement amongst researchers regarding the different variables and understandings of motivation, with research focussing on specific motives and influences. Motivation is an interconnected, multifaceted and complex phenomenon (Dörnyei & Skehan, 2003).

In the context of teaching and teacher education, Sinclair (2008) defines teacher motivation in terms of attraction, retention and concentration: "what attracts individuals to teaching, how long they remain in their initial teacher education courses and subsequently the teaching profession, and the extent to which they engage with their courses and the teaching profession" (2008, p.37). Dörnyei and Ushioda's (2011) research highlights two dimensions of teacher motivation: motivation to teach and motivation to remain in the profession.

As previously highlighted by Dörnyei and Ushioda (2011), understanding motivation within the context of teacher motivation is just as complex, with research using different theoretical lenses to investigate motivation. What is clear, however, is that teachers' motivation to go into teaching is an important factor in recruitment and retention, as shown in multiple studies (e.g., Watt & Richardson, 2006; Butler, 2007; Roth, Assor, Kanat-Maymon, & Kaplan, 2007). An individual's motivation is relevant not only in terms of why they choose teaching but has implications in terms of their well-being, career satisfaction and their persistence in the profession (Richardson, Watt & Karabenick, 2014, Watt & Richardson, 2007, Eren & Tezel, 2010; Roth et al., 2007). In addition, teachers' motivation

also have implications for their teaching effectiveness, their interactions with students and student achievement (Richardson, Watt & Karabenick, 2014; Butler, 2007; Roth et al., 2007).

3.4.1. Investigating motivations to teach

Developing an understanding of motivation is complex. Although definitions of motivation concern what moves individuals to make choices, do something and persist at it (Dörnyei and Ushioda, 2011), there are different theoretical lenses which can be employed to research different motives and influences and thus understand *what* it is that motivates us. As such, researchers have used different lenses and instruments to conduct research into motivations for teaching.

Eccles and Wigfield (2002) highlighted four key areas of motivation theory: (1) theories that focus on expectancy - an individual's expectation to succeed (e.g. self-efficacy theory and control theory); (2) theories that focus on why individuals engage with tasks (e.g. intrinsic motivation theory and goal theories); (3) theories which integrate expectancy and value, emphasizing the relationship between ability and task-value beliefs (e.g. expectancy-value theory and attribution theory; and (4) theories which integrate motivation and cognition, focusing on how motivation regulates ones behaviour and how it related to cognition (e.g. social cognitive theories of self-regulation and motivation). Richardson, Watt & Karabenick (2014) argue that the three main theoretical approaches used in teacher motivations research are: expectancy-value theory (EVT), achievement goal theory (AGT), and self-determination theory (SDT). These three prominent motivational theories have all been used by researchers to investigate and develop an understanding of what motivates individuals to choose teaching as a career.

Theoretical frameworks

Expectancy-value theory, as the name suggests, concerns the expectancy and value constructs that were initially defined by Lewin (1938) and Tolman (1932). Lewin (1928) proposed that the value of an activity, or expected outcome, influenced how important it was to an individual and Tolman (1932) discussed how expectancies for success functioned differently in different areas. Atkinson (1957; 1964) used an expectancy-value model to explain that different achievement-related behaviours (e.g., wanting to be

successful, choice and persistence) are linked to achievement motives, expectancies for success and incentive values. Modern expectancy-value theories (Eccles et al., 1983; Wigfield & Eccles, 1992; 2000) stemmed from the work of Atkinson (1957), linking achievement performance, persistence and choice to individuals' expectancy-related and task value beliefs.

Watt and Richardson (2007), whose FIT-choice scale is used in teacher motivation research and grounded in EVT, used the modern expectancy-value theory to investigate motivations for teaching, guided by the self, value and task variables that predict choices in Eccles et al.'s work (1983). They created the Factors Influencing Teaching (FIT) Choice Scale, which also included items for antecedent socialization and perceptions of previous experiences. Findings from across different contexts suggest that there are similarities in how teaching is perceived by trainee teachers, and their reasons for choosing teaching as a career. Evidence also suggests that motivations matter e.g., levels of professional commitment.

Achievement goal theory posits that 'goals' are significant and influential – they give activities both purpose and meaning (Kaplan & Maehr, 2007). Perceptions, strategies and outcomes depend on what an individual wants to achieve (Butler, 2014), but importantly it is concerned with not *what* an individual is trying to achieve, but on understanding *why* (Maehr & Zusho, 2009). Initially, distinctions were made between mastery goals (that motivate students to acquire and improve skills and understandings) and ability goals (that motivate students to demonstrate their ability) (Butler, 2014). However, over time the theory developed to include avoidance goals. These are goals that are concerned with avoidance motivation. Butler's (2007; 2014) Goal Orientations for Teaching (GOT) framework was developed based on AGT and sought to investigate mastery goals; ability goals; ability-avoidance goals; and work-avoidance goals in the context of teacher education. Findings using the achievement goal theory suggest that the goals that teachers pursue impact their well-being as well as their approaches to teaching – those that are motivated by mastery goals work harder to develop their skills, use mastery-orientated approaches, connect with their students and enjoy teaching more - highlighting the need to recruit teachers who are 'positively' motivated (Butler, 2014).

Self-determination theory distinguishes between different *types* of motivations based on different goals and reasons that individuals are moved to do (Ryan & Deci, 2000a). Early work on motivations distinguished between intrinsic motivation (doing something because it is interesting or enjoyable) and extrinsic motivation (doing something because it leads to a separate outcome) (Ryan & Deci, 2000a). However, other types of motivations can explain behaviour, such as external, environmental motivations which differ in the level of autonomy allowed (Deci & Ryan, 2008; Grolnik, Deci & Ryan, 1997; Ryan & Deci, 2000b). Thus, a distinction between autonomous motivation and controlled motivation came about (Stone, Deci & Ryan, 2009; Ryan & Deci, 2009). Urdan (2014) suggests that SDT is perhaps the second most used motivational theory in the context of motivation to teach. Ryan and Connell (1989) initially assessed teacher's motivations in relation to four types: external, introjected, identified and intrinsic motivations. This approach to investigating teachers' motivations has been used since, including in different cultures. Findings suggest that when teachers' motivations are autonomous, there are positive outcomes for both teachers and students, and when schools are autonomy supportive, it supports teachers' autonomous motivations and therefore positive outcomes.

Why teach?

Research into motivations to teach has generally suggested three broad categorizations:

- Intrinsic: Intrinsic reasons for choosing a career focus on individual's internal factors such as their interest, passion, aspiration and satisfaction.
- Extrinsic: Extrinsic reasons are based on factors outside of the job itself such as long holidays, level of pay, social status and working conditions.
- Altruistic: Altruistic reasons are those that view teaching as having social worth. There is a key theme of serving others and society.

But the issue with such broad categories is that within each of them are separate motivation factors.

Early research into teacher motivation indicated that job satisfaction and family life were important to those entering teaching (Richards, 1960). Fox's (1961) research identified

four common reasons: a desire to work with children, a desire to impart knowledge, the opportunity to continue with education and providing a service to society.

Lortie's 1975 study equally identified similar attractors to the profession: *interpersonal theme,* for instance expressing a desire to work with young people; *service theme,* such as wanting to serve society; *continuation theme*, such as interest in subject-matter; *material-benefits*, which include salary and security; and *time compatibility*, for example having shorter working hours and long summer holidays.

Joseph and Green (1986) added to this with three more motivational themes: *simulation theme,* choosing teaching to be involved in a creatively challenging and rewarding job; *influence of others,* for example being influenced by parents or former teachers, *psychological theme*, which includes wanting to have authority or wanting to be loved by students.

Since then, teachers' motivations have been studied across different countries and cultures seeking to explore motivations to teach, including from different perspectives. Many of the studies use different scales. For example, some studies have used Orientation to Teaching Scale (Ferrell & Daniel, 1993), the Modified Orientations to Teach Survey (Sinclair, Dowson & McInerney, 2006), the Reasons for Teaching Scale (Kyriacou et al., 1999) and the FIT-Choice Scale (Watt & Richardson, 2007).

As discussed in the previous section, one of the most common theoretical frameworks used is the expectancy value framework, which the FIT-Choice scale is grounded in. The FIT-Choice framework proposes 12 motivations to teach: *teaching ability, intrinsic career value, fallback career, prior teaching and learning experiences, social influences, job security, time for family, job transferability, shaping the future of students, enhancing social equity, making a social contribution,* and *working with children and adolescents*. There are clear similarities between this and the early research on motivation, with some new additions.

However, although the FIT-Choice Scale is widely viewed as comprehensive, there is also research to suggest that there are other factors which may impact choice to teach. These include the pathways that individuals follow to train to teach, as well as cultural

and contextual factors (Boyd et al., 2006). Furthermore, according to Herzberg's motivation theory, there are factors which are motivators, and those that can lead to dissatisfaction if they are absent or perceived at an appropriate level – called hygiene factors. These are particularly important in terms of retention of teaching staff which is an international concern.

This thesis adopts the full version of the FIT-Choice Scale. This makes it possible for future research to compare results of this study with those in other countries and culture.

Factors influencing teacher recruitment and retention

While factors influencing recruitment and retention have been widely discussed and researched, there remain some factors that cannot be explained. For this reason, researchers in this field have often looked towards people's motivation to go into teaching or the attractors to teaching and their motivation to stay (detractors). This section discusses some of these potential factors which have often been attributed to difficulties in recruitment and retention.

These factors can be classified as:

- **Hygiene factors**, such as pay, teacher status and working conditions.
- **Contextual factors,** e.g., economic cycles.
- **Recruitment factors**, which concern how teachers are recruited, including routes into teaching and cost.
- **Personal factors**, including individuals' career motivations and their perceptions of teaching as a profession. This also includes teacher characteristics, such as gender and career choice.

3.4.1 Hygiene factors

Recruitment and retention challenges raise the wider problem of sustainability of the teaching workforce and the quality of education in the long term. These are serious and pressing concerns. There are several hygiene factors which are believed to affect both

recruitment and retention: pay, working conditions and status. It is important to understand these to be able to provide solutions to the teacher recruitment and retention crisis.

Pay

The pay of teachers relative to other similar professions is often cited as an important reason for the difficulties in attracting teachers. In the UK, the competitiveness of teachers' pay compared to the wider market has fallen since 2010 while the average earning in the UK economy has grown (Worth, 2023). Sibieta (2020) highlights that, in England, shortages are most acute in subjects such as mathematics and science, where graduates can command higher salaries outside of teaching. This is not the case in subjects such as arts, history and other humanities where outside salaries tend to be lower. This is also a common theme in the U.S for science and mathematics graduates (Carver-Thomas & Darling-Hammond, 2017).

However, although the competitiveness of teachers' pay and the difference between graduates' career pay by subject is evidenced by average pay analysis, this does not mean it is a decisive factor in individuals' decisions to teach, or not. For example, Davies and Hughes (2018) found that salary is not often a key motivator. See et al.'s (2020) reviews of teacher recruitment and retention found that financial incentives may be an effective strategy in attracting individuals to teach, and to specific areas, subjects or hard-to-staff schools, but incentives need to be large enough to compensate for challenging working conditions. More recent evidence from See et al. (2021) suggests that when other factors such as socio-economic background and cultural background are accounted for, salary is not an important influence in people deciding to teach. This highlights the complexity of motivations to teach and the role of pay in this. Pay may not be one of the most important influences in deciding whether to teach, but financial incentives may make it a more attractive choice, particularly for those already considering teaching.

In terms of pay and teacher retention, Worth (2023) suggests that the net impact of pay changes on the leaving rate may be evidenced by the fall in teachers leaving the profession in 16/17 and 18/19. But it is important to recognise that there may be a number

of other factors which contributed to this fall in attrition, such as a slowdown in the pace of policy changes– correlation does not equal causality. Research which has synthesised the findings from high quality studies (See et al., 2020) has found that financial incentives which are used to attract individuals to teaching, and tie them in to teach for a set period, do not support retention once they are removed. The impact of financial incentives which boost pay in the short-term has no long-term effect. Teachers leave at the same rate once these incentives are removed. This again demonstrates the complexity of pay in motivations for staying in teaching.

Working conditions

The high turnover in schools has also been attributed to the poor working conditions of schools and school culture. Prior research has found that while pay may be important in enticing some into teaching, it is not enough to keep them in the profession. The effect of the High Priority Location Stipend Program, for example, was observed only in the first year after implementation (Fitzgerald, 1986). Teachers who left indicated that they were appreciative of the incentives but did not think the stipend was high enough to compensate for the punishing working conditions and poor discipline in school. These teachers also intimated that they would be happy to work in challenging schools if student discipline and working conditions could be improved, thus underlining the important role of working conditions in teacher retention.

Shirrell's (2014) survey of student teachers before they began teaching and after showed that challenging working conditions did not change student teachers' desire to teach, but the poor working conditions in their training schools did impact on the length of time they plan to stay in teaching.

Teachers' workload, pupil behaviour and discipline, and school management or leadership support can all contribute to the working conditions.

Workload

Workload is perhaps one of the highest profile aspects of working conditions cited (Perryman & Calvert, 2020; Long & Danechi, 2019; Torres, 2016; Lynch et al., 2016; Worth, 2023. There are also numerous media reports which emphasise workload concerns (e.g., Richardson, 2017; 2019; Lightfoot, 2016; Haywood, 2022) which could impact the attractiveness of the teaching profession for those considering teaching as well. This is important, particularly in relation to See's (2004) findings which demonstrate that those who have considered teaching, but are persuaded otherwise, might be discouraged by the perception of heavy workload of teaching.

The Teaching and Learning International Survey (TALIS), a five-yearly, international large-scale study of teachers administered by the OECD in 2018, reveals that both secondary and primary school teachers in England report working hours above the OECD average (Jerrim & Sims, 2019). English secondary teachers reported working, on average, 49.3 hours a week, with the overall average being 41 hours. Primary school teachers reported working 52.1 hours a week, which was more than any other OECD countries bar Japan. Further, 53% of primary teachers and 57% of lower-secondary school teachers felt that their workload was unmanageable. This is not a new phenomenon, with workload surveys from the School Teachers' Review body reporting high working hours since 1994 (STRB, 2006; 2021; DfE, 2023). The recent report on teacher's working lives (Adams et al., DfE, 2023) provides further evidence that the workload for teachers is high.

Although the number of hours worked can be a useful measure of workload, it is important to recognize that the concept is a measure of different types of work carried out (e.g., teaching, paperwork, planning, marking, assessment). In particular, time spent planning and marking is more of a concern than time spent teaching. Jerrim, Sims and Allen's (2021) analysis of national data showed that teachers who report spending more time on planning and marking have lower levels of wellbeing. Such was the concern that the government in England has introduced a number of policies to address workload, for example, the DfE 2019 Teacher Workload Survey (Walker, Worth & Van den Brande,

2019) and the Early Career Framework (ECF). ECF was aimed at providing teachers with a strong induction programme and early professional support by way of mentoring and reduced teaching timetable.

Leadership and management

Principal's leadership and teachers' perceptions of administrative support can determine the ethos and working conditions within the school. Studies in the US, such as Mertler's (2016) survey of 9000 teachers and Geiger and Pivovarova's (2018) study of 1400 teachers revealed that unsupportive work environments and poor school leadership affected decisions about wanting to leave. Similar findings are reported in the English context. Sims' (2017) analysis of TALIS data from 2013 found that positive association between strong school leadership and teachers' job satisfaction, and a reduction in teachers' likelihood of leaving the profession. These are strong associations and emphasise the critical importance of school leadership for retention.

Observational studies have suggested that teachers' perceptions of administrative support and leadership are strong predictors of teachers' intention to leave (Allensworth et al., 2009; Boyd et al., 2011; Marinell & Coca, 2013; Sims, 2017; Boyd et al. 2011). Johnson, Kraft and Papay (2012), for example, argue that it is the social conditions of the school, school culture and relationships with colleagues which are most influential.

School leadership support for early career teachers and professional development for experienced teachers also appear to support teacher retention (Cohen, 2005; DeJong & Campoli, 2018; Latham & Vogt, 2007; Ronfeldt & McQueen, 2017). See et al.'s (2020) systematic review considered the impact of support for new teachers; although all included studies reported positive results and teachers exposed to programmes of support were less likely to leave teaching, the studies were of low quality meaning that the effectiveness of these is unclear. In England, initiatives such as the Early Career Framework based training programme (DfE, 2023b) have been introduced to support this, but more research is needed to establish how effective support programmes are.

In addition to the notion of support, school climate is another key theme which emerges. This is a slightly more challenging issue to define as it may relate to the climate, or culture, established by the leadership and management of the school, Local Authority or Trust, or the Government through, for example, policies and initiatives. It also might relate to working practices, levels of accountability, regulation of the profession, and performativity to name just a few (Perryman, 2009; Carver-Thomas & Darling-Hammond, 2019; Perryman & Calvet, 2020). School climate is not established in a vacuum and there are many factors which contribute to this, but as it is concerned with leadership and management – both in terms of individuals in schools or the wider education system as a whole - school climate and culture will be explored in this section as an extenuation of leadership and management.

Perryman and Calvet's (2020) research found that for those who had left teaching, target driven culture was noted by 57% and of those who were considering leaving in the future, it was noted by 55%. This finding links with Ingersoll, Merrill and Henry's (2016) study in the US which found that accountability made teacher retention more challenging in low-performing schools. Berryhill, Linney and Fromewick (2009) suggest that higher levels of accountability mean teachers do not feel efficacious, which can increase retention rates.

Discipline

Associated with school climate is pupil behaviour. Previous studies have suggested that poor student behaviour generally has a negative impact on teachers' stress, exhaustion and discontent (Harmsen et al., 2018; Aloe et al., 2014), which could potentially lead to early departure of teachers. Sims & Jerrim (2020) found that classroom behavioural management issues in England was associated with teacher turnover and attrition. Their analysis shows that, for novice teachers, a one standard deviation increase in the discipline score is associated with a reduction in the probability of leaving the school by three percentage points, and a reduction in the probability of leaving the profession by one percentage point. Grant and Brantlinger's (2022) study of math teachers found that individual perceptions of more positive student behaviour predicted a lower risk of leaving

On the other hand, other studies that found no link between student behaviour and retention levels (e.g., Carver-Thomas & Darling-Hammond, 2019). In Perryman and Calvert's (2020) study, behaviour was also not cited as a reason for leaving from those who had left, or who may leave in the future.

Perhaps it is not the behaviour of the pupils itself, but the support that teachers get from the school leadership with regards to discipline that is the key (Johnson & Birkeland, 2003; Kraft et al., 2016; Sims & Jerrim, 2020).

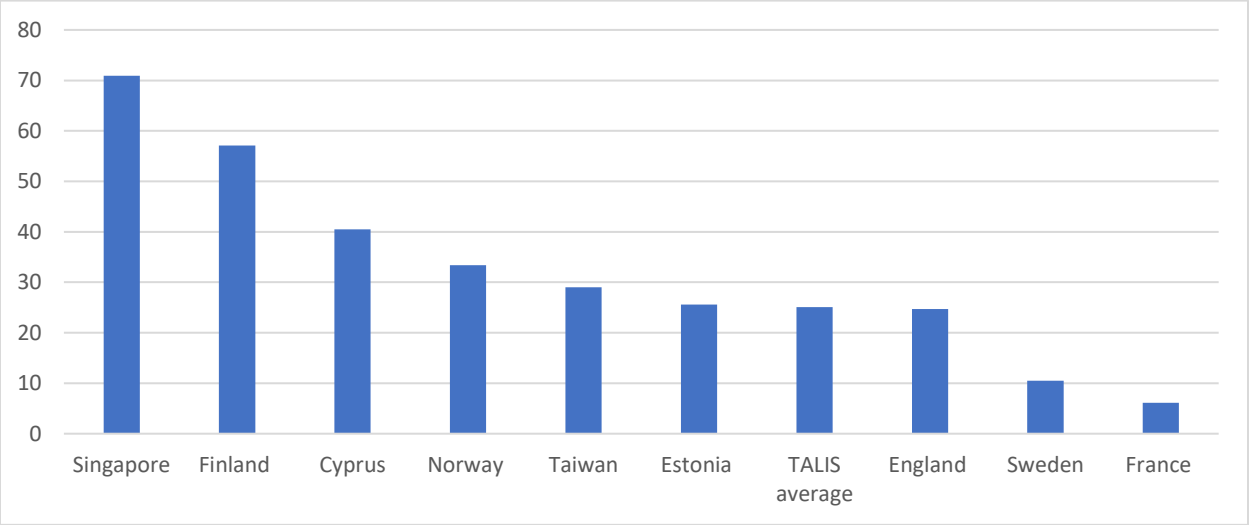
Although student behaviour may be a concern for teachers, Gorard et al. (2021) found that when considering teaching as a career, potential teachers are not any more or less concerned with poor discipline. Again, this suggests that it is not the poor behaviour of pupils per se that put people off teaching.

In summary, a number of factors can contribute to teachers' working conditions. These include, teachers' workload (planning, marking, meetings and teaching), their working environment, such as pupil behaviour, and school leadership and organisational management. And teachers' working conditions, in turn, can influence teacher turnover and attrition. Therefore, any policies to improve teacher supply might do well to consider these factors.

Low status

There has been much research on perceptions of the teaching profession. International research suggests that teaching is generally viewed as lower in social status and pay (Watt & Richardson, 2012; Lin et al., 2012; Fokkens-Bruinsma & Canrinus, 2012a; Gratacós et al., 2017; Ivanec, 2020) although in some countries, teaching enjoys a high status. TALIS data showed that in Finland, Singapore and Cyprus, countries which traditionally are not known to have a teacher shortage, teachers reported being valued by society (see Figure 8). These are countries which are known to have low attrition rates, around 3-4% annually (Sutcher et al., 2016). In England, on the other hand, only 25% of teachers thought they were valued by society.

Figure 8: Valued by society



Gorard et al.'s (2021) survey of undergraduates in England found that job status was not a particularly important career driver for undergraduates in general. However, when comparisons were made between those who wanted to be teachers and those who did not, the status of teaching became an issue. For those already applying or intending to teach, career status was not a particularly important consideration in their decision making, but for those who have thought about teaching and decided against it, the negative status of teaching is a potential deterrent (See, 2004).

Although the perceived lower status of teaching as a career is often thought to be a factor potentially discouraging some from taking up teaching as a career, there is very little research which looks at whether the status of teaching is a factor in retention. Those that did asked about teachers' intention to leave, and then correlated their responses with their perception of teacher status (e.g., Perryman & Calvert, 2020). There are two problems with this kind of research. First, these teachers have not left, and so it is not possible to say if it is the perceived status of teaching that drove them out. Second, such correlational studies can only suggest that one factor is related to another, but does not suggest that one factor leads to another. It is likely that those who want to leave are more negative about the status of the profession, rather than the low status makes them want to leave.

Also, most research on teacher status is based on teachers' self-report, but it is not always clear whether the items relate to their perception of teaching, or their perceptions on society's view of teaching. There is a difference between the two which needs to be made clear.

3.4.2 Contextual factors

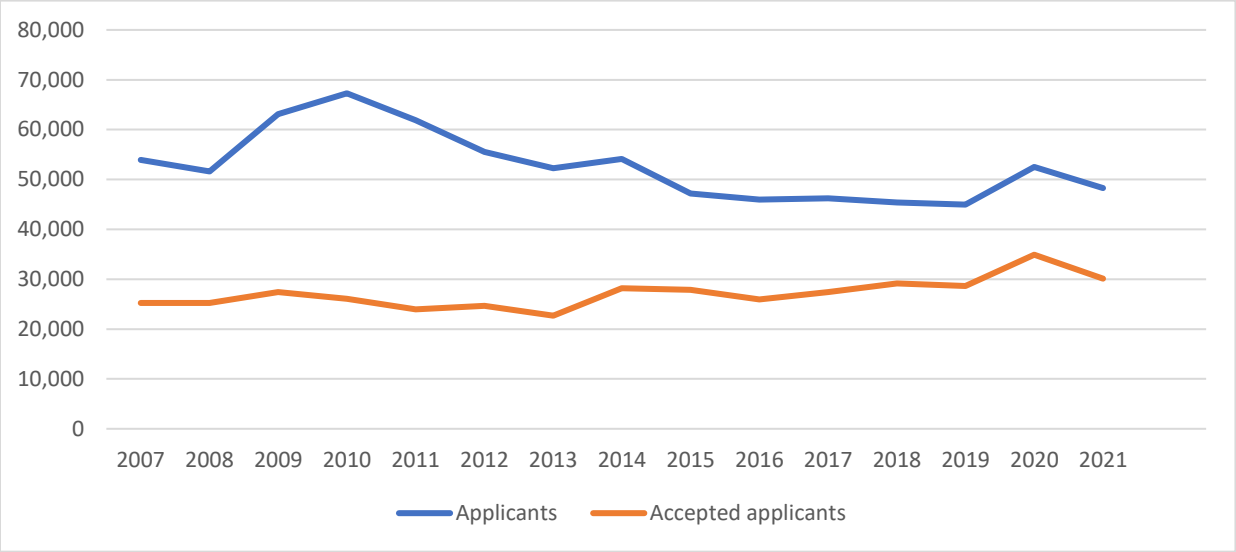
People's decision to go into teaching may be influenced by contextual factors, such as economic cycles and employment situation at the time (Dee & Goldhaber 2017; Aldeman, 2015; Ingersoll 2011). Consideration of the impact of the wider economic situation on teachers' career decisions is necessary for workforce planning but is an area about which there has been only limited research.

Economic cycles

Economic stability is often viewed as a factor in both recruitment and retention. During times of economic instability, recruitment and retention rates appear to improve. Figure 9 shows teacher training applicants and acceptances for teacher training. There are much greater fluctuations in the number of applicants when the economy is unstable. The most recent is application to teacher training in 2020 after the Covid-19 pandemic and the resulting economic uncertainty from this.

The Education Policy Institute (EPI, 2022) suggests that the relative security and stability of teaching makes it attractive in times of uncertainty. This not only impacts new recruits who might potentially have pursued other careers, but also existing teachers who might have been more likely to leave teaching. The notion of teaching being a secure job is also highlighted in the literature of trainee teachers who have already made the decision to teach: FIT-Choice Scale studies, for example, often rate job security as an influential factor (Watt & Richardson, 2012).

Figure 9: Number of teacher training applicants and acceptances 2007-2021



Sources: UCAS teacher training statistical release (2021), UCAS applicant data (2020) and GTTR annual report (2013)

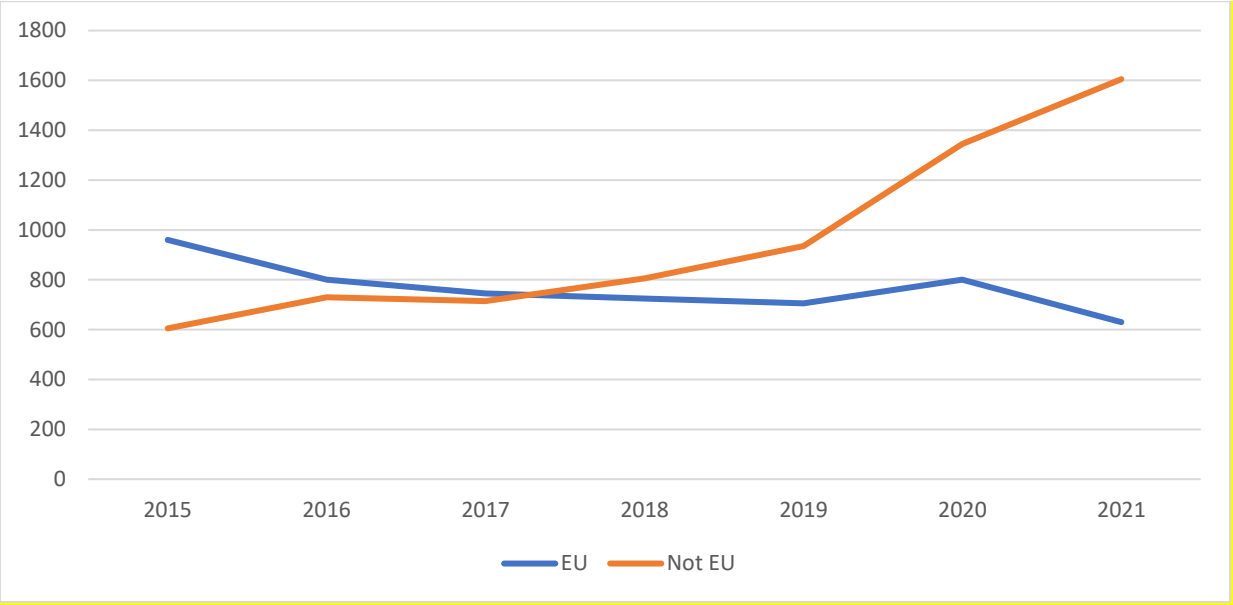
Dolton (1996) and Dolton et al. (2003) suggest that times of economic uncertainty increase people's willingness to consider, and choose, teaching as a career. When prospects in alternative occupations are poor, teaching may be chosen as a 'fallback' option. Research which examines the motivations of those who have decided to teach suggests that teaching is not seen as a 'fallback' career and individuals do not choose teaching because of this (Davies & Hughes, 2018; Watt & Richardson, 2007). However, further research might seek to investigate whether motivations for teaching differ during different economic cycles, as those who may not previously have chosen to teach do so. It has to be mentioned that research on teachers' motivations are invariably based on self-report. It is, therefore, conceivable that people might not be willing to admit to going into teaching because they are unable to find other jobs.

While it is logical to think that job security and stability play a part in peoples' career decisions at a time where there is much instability, how far is it an important influence for those who are already considering teaching, or whether it also influences those who have previously made the decision not to teach is unclear.

UK exit from the EU

Long and Danechi (2022) suggest that recruitment and retention challenges may be impacted by the UK's exit from the EU, as it is harder to recruit from the European Economic Area to fill shortages.

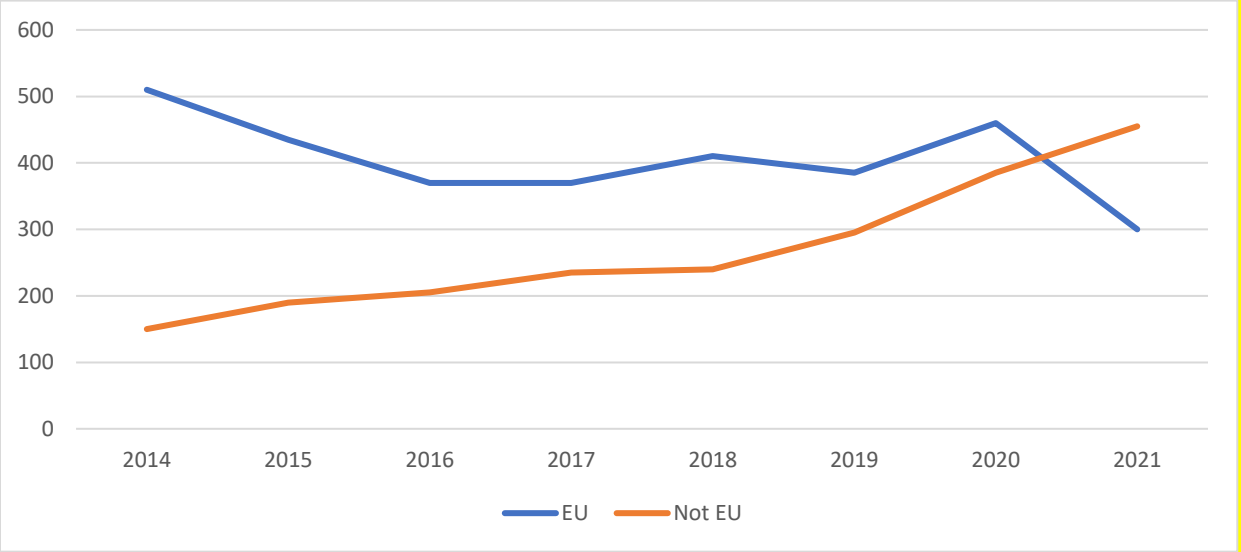
Figure 10: Teacher training applicants EU (excluding UK) and not EU



Source: UCAS teacher training statistical release (2021)

Figure 10 shows that whilst applicants from non-EU countries have risen steadily, and more sharply in the last few years, there has been a decline since 2020 in EU applicants. The same can be seen in acceptances (Figure 11).

Figure 11: Teacher training acceptances EU (excluding UK) and not EU



Source: UCAS teacher training statistical release (2021)

Of course, there are different factors at play during this time, such as the impact of the Covid-19 pandemic and wider economic factors, but there is a change post-2020.

3.4.3 Recruitment factors

Factors directly related to recruitment are not often considered literature which examines teach supply. However, as they concern recruitment, factors including routes into teaching and the cost of training to teach, need to be explored.

Routes into teaching

At the time that the primary research of this study began (2019), government policies to increase the number of trainee teachers had resulted in expansion of routes. Routes and pathways into teaching had been evolving quickly (Williams, Pollard, Hink, Huxley & Marvel, 2016). In 2019, which is when participants for this study were recruited, there was a large choice of routes (including undergraduate and postgraduate options) available for intending teachers to apply to: Bachelor degree leading to Qualified Teaching Status (QTS) or early years teacher status (EYTS); and postgraduate pathways, including Higher Education Institution (HEI)-led training or school-led training (SCITT, School Direct (fee),

School Direct (salaried) or other routes such as Teach First, Researchers in Schools, Troops to Teachers.

A review of the customer journey to training to teach (Williams et al., 2016) found that the volume and spread of options available were much broader than for other professions. In fact, a House of Commons Children, Schools and Families Committee report (2010) highlighted that there were more possible entry options into teaching in England than any other country. The Williams et al.'s (2016) review highlighted that, to those looking to train to teach, the numerous pathways could be "highly confusing" (p.86). This led to some individuals deciding against initial teacher training (ITT) before they had properly researched the options, or they were confused by the array of options which prevented them from applying. This has implications for the levels of teacher recruitment. Skaalvik and Skaalvik (2012) also found that availability of ITT is important in choosing teaching as a profession. This therefore suggests that the ITT market, and wide variety of options, might potentially have had a negative impact on recruitment.

Although there have been studies which have evaluated the different teacher training routes, these have focused on outcomes relating to teacher performance, as opposed to teacher recruitment and retention (See et al., 2020). One study (Boyd, Grossman, Ing, Langkford, Loeb & Wyckoff, 2011) found that the Maths Immersion programme in NYC was successful in attracting high quality teachers to teach in some of the most challenging schools. Further research on whether alternative routes to teaching in England can positively impact retention would be a valuable area for research to explore.

Current ITT market reform has introduced several measures to improve the quality of ITT, which includes reaccreditation. The outcome of the 2022 reaccreditation process is that the number of providers will be reduced to 179 in 2023. The impact of this is yet to be seen: providers closing down represents a loss of capacity to the ITT system however, those providers not closing down may increase their capacity to make up the shortfall. There may also be issues with lack of providers in geographical locations, impacting local recruitment (Worth, 2023).

Cost of training to teach

The cost of training to teach, particularly postgraduate courses, has been indicated as a barrier to recruitment. For example, Williams et al. (2016) highlights that the cost of fees and lack of income whilst studying presented a “dual burden” and was a barrier to some individuals training to teach. Salaried Direct, where trainees receive a wage whilst training to teach was presented as a viable means to support this. However, whether it is effective in its aim has not been evaluated.

See et al. (2020) found that financial incentives seem promising for attracting new teachers into the teaching profession, and in increasing the number of teachers in challenging schools with a high proportion disadvantaged children. However, they did find that the effect was stronger for high performing schools and those with lower proportions of disadvantaged children. Looking specifically at England, where bursaries are offered to trainees in secondary shortage subjects, evidence suggests that bursaries are not attracting shortage subject teachers to state-funded schools: a lower proportion of bursary holders teach in state-funded schools compared to non-bursary holders (DfE, 2018a).

The evidence suggests therefore that financial incentives may support teacher recruitment, but not as effective for retention (See et al., 2020). The gain is for recruitment, not long-term teacher supply.

3.4.4 Personal factors

There are several personal factors which are believed to affect both recruitment and retention. Understanding these will support solutions to the teacher shortage crisis. This section will look at individuals’ motivation to go into teaching or not, their persistence in the profession and their perceptions of teaching in general. Gender and career choice will also be discussed.

Motivations to teach

There is a large body of work related to individuals' motivations to enter the teaching profession. Career choice literature generally has emphasised the key role personal motivations play in choosing a career, and thus understanding individual's decisions to choose teaching or not needs to be considered carefully. Although pay is a motivational factor identified in research on motivations to teach, it was explored earlier as a hygiene factor particularly as research into retention highlights this as a factor which may lead to dissatisfaction. This section will discuss the other motivations to teach.

Brookhart and Freeman's (1992, p.46) review of 44 studies found that "altruistic, service-orientated goals and other sources of motivations" are important to those who choose teaching. Studies since then report similar motivations: intrinsic value, social utility value and perceived teaching ability (e.g., Watt & Richardson, 2007; Watt et al., 2012; Fokkens-Bruinsma & Canrinus, 2012).

Intrinsic reasons to teach generally relate to interest in the subject and/or the enjoyment of teaching itself. Interest in subject has been found to be important in a number of studies (e.g., Reid & Caudwell, 1997; Younger et al., 2004). However, the importance of the subject-matter might also be dependent on discipline. For instance, Reid and Caudwell's study (1997) suggested that art graduates are more inclined to highlight continued engagement with their discipline than science and mathematics graduates, and was most important to language teachers. Heafford and Jennison's (1998) study, which looked at career choice and development of 165 PGCE students from the University of Cambridge, found that of those who remained working as a teacher (83 in total), working with children and the ability to use their subject knowledge was seen as an enjoyable feature of the job. This may suggest that subject interest might impact not only recruitment, but also retention by increasing career satisfaction and enjoyment.

Interest or enjoyment in teaching itself is another influential motivation cited in most literature on this topic. It is perhaps not surprising that this is identified, given that teaching requires teaching activities. Some studies suggest that teaching experience can be influential. For example, O'Sullivan et al. (2019) found that enjoyment of teaching-like

experience, such as coaching athletes, were influential in decisions to become a teacher. It would be interesting for research to explore whether teachers who chose to teach based on such motivations are more likely to remain in teaching, given that previous experience may help confirm if teaching is the 'right' career choice. This also links to the influence that positive school experience have on those who choose teaching (Wong, 1994; Gorard et al., 2021).

Working with children is another intrinsic motivation which research suggests is important to those who choose to teach (e.g., Reid & Caudwell, 1997; Watt & Richardson, 2007; 2008; Watt et al., 2012; Glutsch & König, 2019; Heinz et al., 2017; Moreau, 2015). Reid and Caudwell's study (1997) of motivations for choosing teaching in England found that 96 percent of the 453 teacher trainees highlighted "enjoying working with children" and "feeling that teaching would bring high job satisfaction" (p. 47). Heafford and Jennison (1998) report that for those who stayed in teaching, working with children was highlighted as source of job satisfaction. This suggests that enjoying working with children not only attracts people into teaching but may induced them to stay in teaching.

Finally, ones' perceived teaching ability is another factor inducing some to go into teaching (Watt et al., 2012). This is not surprising as research suggests that individuals choose jobs based on what they think they will be good at (Bandura, 2006). However, as well as it being an important motivator, there is evidence which suggests that self-efficacy (belief in what one can or cannot do) may be linked to job satisfaction and retention in the future. Research indicates that teacher self-efficacy is positively related to job satisfaction and engagement, and negatively related to emotional exhaustion (Federici & Skaalvik, 2012; Skaalvik & Skaalvik, 2014; Saks, Hunt, Leijen & Lepp, 2022).

Further, other studies appear to suggest that motivations of trainee teachers, including perceived ability, may relate to professional development intentions (Watt & Richardson, 2008; Watt et al., 2014). This highlights the potential importance of ability not only as an influencing factor for choosing teaching, but also in engagement, job satisfaction and retention in the long run.

Altruistic reasons, such as making a social contribution is often cited as a key career driver in service occupations like teaching (Watt & Richardson, 2007; 2008; Watt et al., 2012; Konig & Rothland, 2012; Berger & D'Ascoli, 2012; Fokkens-Bruinsma & Canrinus, 2012a; Argentin, 2013; OECD TALIS, 2018).

Much of the research on motivations has tended to focus on the views of those who are already teaching, or who are training to be teachers – in other words, those who have already made the decision to teach. There is currently limited research which looks at the reasons why some have decided not to teach (e.g., See, 2004; Gorard et al., 2021), or compares the career drivers of individuals who have chosen to teach with those who are still deciding or have made the decision not to. Learning about individuals who are still deciding, or have made the decision not to, is important to inform recruitment policies. The few studies that did include those by Kyriacou et al. (2002), See (2004) and Gorard et al.'s (2021). See (2004) and Gorard et al.'s (2021) studies were conducted in England. It is worth noting that my EdD research was conducted prior to Gorard et al.'s study was published (2021), so I did not have the benefit of their wisdom in hindsight.

Gorard et al.'s (2021) study found that what undergraduates look for in a job is one that is enjoyable, with a good working environment, and that provides intellectual challenge, job security, promising career prospects and competitive salary in the long term. Of particular significance is the finding that non-teachers were more likely to value factors like salary, promotion opportunities, job status and good working conditions. For those already applying or intending to teach, extrinsic factors such as salary, career status and progression were less important; instead, they reported intrinsic drivers such as wanting to give back to society, sharing knowledge of their subject, good prior experiences, and academic interest. Therefore, for the group not intending to teach, the perception that teaching does not offer these extrinsic motivations may be a potential barrier, and one which recruitment initiatives and policies might seek to address. For this reason, it is also necessary to examine people's perceptions of teaching.

Perceptions of teaching

Individuals' perceptions of teaching may influence their decision to be teachers or not. Perceptions of teaching tend to focus on two areas: demand and task return. Demand relates to the expertise (level of knowledge required) and demands, or difficulties, of the teaching profession (how hard work teaching is). Demand also includes the notion of workload which was explored earlier as a separate hygiene factor given the prominence of this factor in relation to recruitment and retention research and policies. 'Task return' refers to the return or reward for performing the task. In teaching, the return could be perceptions of salary and status of teaching. As with workload, salary and status were discussed in earlier sections due to the high-profile nature of these factors in teacher supply literature.

Teaching is often seen as a highly demanding career, both in terms of levels of expertise and workload required. What is interesting is that trainee teachers are well aware of the demands of the job but are not put off by it. Indeed, it might be this that initially draws people to the profession. Gorard et al.'s (2021) study showed that intellectual stimulation is important to undergraduates when making decisions about careers. They also found that what drives people into teaching is the perception of teaching as offering relatively high levels of intellectual stimulation– perhaps feeding into the notion of teaching as an expert career. This perception of teaching as a professional career requiring expert knowledge and providing intellectual stimulation could be a potential attractor to teaching.

Despite teaching being seen as a career with heavy workload, and also a profession with lower levels of status and pay, career satisfaction ratings for teaching are uniformly high. This may be because those who are interested in teaching are less concerned with status and pay than their peers (Gorard et al., 2021). The reasons for this may be more complex than much research would indicate. For example, Gorard et al.'s (2021) research reveals that in general, teaching disproportionately attracts students from less educated families with less prestigious occupational backgrounds, who have lower attainment prior to university. This may explain why perceptions of teaching as lower in status and pay are

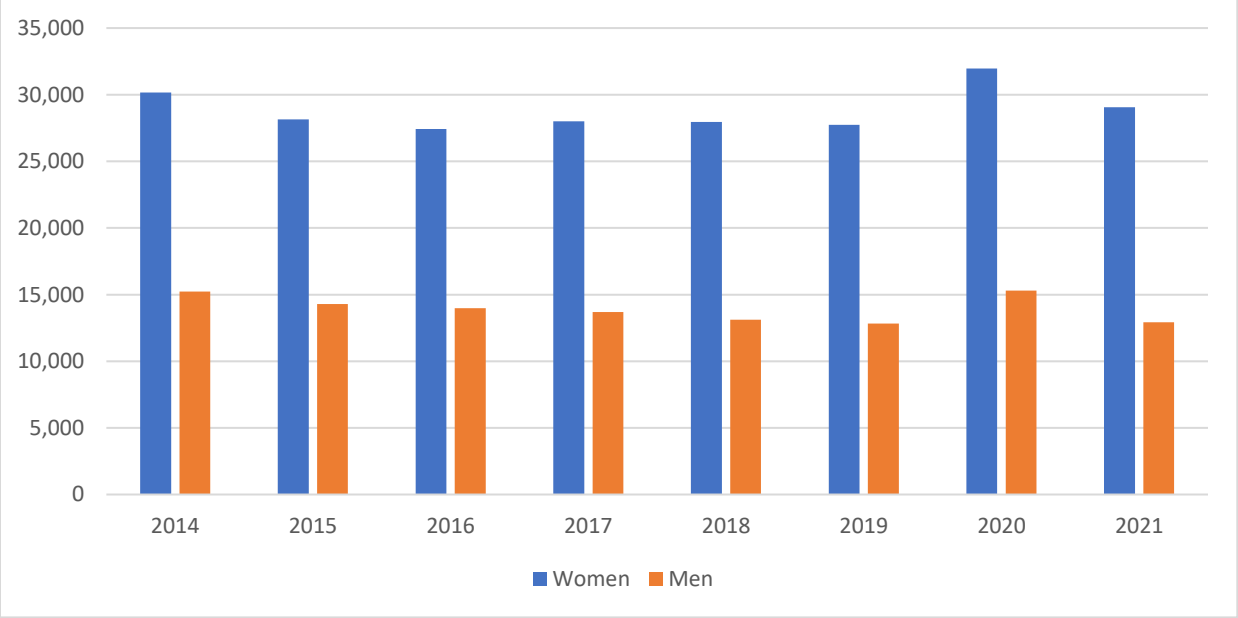
not considered a major deterrent to those wishing to teach. Or of course, it may be that they are motivated by other aspects and therefore such perceptions are not as important.

Gender

Another personal factor influencing teacher recruitment and retention is gender. Teaching is often viewed as a profession more suitable for women than for men. Research indicates that women are more likely to choose to teach(OECD, 2017; Education Policy Institute, 2020). In 2014, on average, more than two-thirds of teachers across the OECD were women (OECD, 2014). The most recent report (OECD, 2021a) similarly demonstrates that teaching remains largely dominated by women.

Gorard et al.'s (2021) research found that female students were more likely to have considered teaching (55% v 22%) than males. They were also far more likely to intend to teach. Data from UCAS also shows that applicants into initial teacher training are predominantly female (Figure 12).

Figure 12: Applicants to teacher training by gender



Source: UCAS teacher training statistical release (2021)

Some studies suggest that not only is teaching viewed as a job that may be more suited to females, but there may be negative perceptions of males working with younger children (Hansen & Mulholland, 2005; King, 1998; Stroud et al., 2000; Johnston, McKeown and McEwen, 1999b). DfE data (2023) shows that a higher percentage of men teach in secondary compared to primary (35.3% in secondary vs 14.1% in nursery/primary). Although females still dominate the secondary teaching workforce, research which has looked at subject specialism reveals that for some subjects, the reverse is true. For example, Wheldon (2015) found that STEM subjects tend to be relatively male dominated.

Considering teachers out of service – those who have left the profession – DfE (2023) data suggests that the percentage of males who leave the profession sits around 27%. (Table 1). When compared to the total teaching population, proportionally 1% more men leave the profession per year than women. This is interesting, as research often suggests that males leave at a higher rate than women. For example, Heafford and Jennison's (1998) study found that 33 out of the 165 survey respondents were occupying a post which was not related to education – and 26 out of these 33 (79%) were men. A more accurate way would be to see what proportion of all male teachers leave the profession, compared to the proportion of female teachers. The study found that the low status of teachers, lack of pupil motivation and low level of salary appear to be important in male's decisions to leave the teaching profession. This supports the findings that men are potentially more motivated by extrinsic factors, such as salary.

Table 1: Total FTE and out of service compared by gender

		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Total no. of teachers (FTE)	**Female**	74%	74%	74%	74%	74%	74%	74%	74%
	Male	26%	26%	26%	26%	26%	26%	26%	26%
Out of service (FTE)	**Female**	72%	73%	73%	73%	73%	73%	73%	74%
	Male	28%	27%	27%	27%	27%	27%	27%	26%

Source: School workforce in England (2023)

There are also reported differences in motivations. Research indicates that women are more likely to choose teaching based on motivations such as wanting to work with children, time for family and positive prior experiences with men citing extrinsic reasons more frequently (Watt, Richardson & Devos, 2013; Giersch (2021). On the other hand, men were more likely to choose teaching as a fallback career (Watt, Richardson & Devos, 2013) which might be linked to the feminised view of the profession as discussed earlier.

Career choice: Career switchers

Individuals' career decisions are not fixed throughout their lifetime. There is a growing number of professionals switching careers and training to be teachers. Now Teach, for example, recruit experienced and successful people into teaching. These career changers are another source of teacher supply. It is therefore relevant to understand the motivations of these career changers, and how policies could be framed to attract these. Priyadharshini and Robinson-Pant (2003) identified six broad profiles of those who changed careers to teach: the parent, the successful careerist, the freelancer, the late starter, the serial careerist and the young career changer. However, it must be noted that the sample was small and the study only considered secondary teachers. For 'the parent', teaching being family friendly was important. For 'the freelancer', 'serial careerist 'and 'young career changer', job security/stability was important. For the others, various reasons were identified.

The findings suggest that some key motivations play an important role in decisions to switch careers, particularly in relation to what teaching can offer when compared to other occupations. In addition to the security of teaching and its family friendly nature, social contribution and previous teaching experiences also appear important. But they did not compare the motivations of these career changers with first career teachers (i.e., those straight from university). While job security and the family friendly nature of the profession are often not considered important in FIT-Choice surveys of motivations, they appear to be important to career switchers (Priyadharshini & Robinson-Pant, 2003). This reinforces

the danger of research that includes the view of only those in teaching. Career drivers that are pertinent to career switchers are missed.

Looking first at job security, this was particularly important to career switchers whose pervious jobs were temporary or freelance. This could be seen as a ‘push’ as opposed to a ‘pull’ factor, because it is potentially based on what their previous job did not offer, or they were dissatisfied with. Although survey data of career switchers in Scotland found that job security was not a decisive factor in participants decision to switch jobs, interview data suggests that motivations for changing careers was, in part, based on levels of job security (Wang, 2019). Similarly, Smith and Pantana (2010) also found that job security was not rated highly as a reason for switching to teaching, but in the open response question, the relative security of teaching was mentioned by many participants as a motivator. This supports Priyadharshini and Robinson-Pant’s (2003) findings and suggests that job security may well be a ‘push’ factor rather than a ‘pull’ factor.

Other research also confirms the importance of teaching being family friendly to career switchers (Richardson and Watt, 2005; Smith & Pantana, 2010; Laming & Horne, 2013; Wang, 2019). Richardson and Watt (2005) found that some female trainee teachers expressed wanting to choose a career that could accommodate their familial responsibilities. In particular, how the working schedule of teaching and school holidays allowed for childcare commitments was mentioned. The perception of teaching as family friendly is an important consideration for women career switchers.

Another reason often cited by career switchers who have made the decision to teach is the desire to contribute to society (Richardson and Watt, 2005; Laming and Horne, 2013). However, Wang’s (2019) study found that although this was an important factor for career switchers in Scotland, there was no real difference when compared to first career teachers. This suggests the desire to contribute to society is not unique to career switchers. Intrinsic career value, as discussed earlier, is a key factor which motivates many individuals to choose teaching. But, when compared to those who choose teaching as their first career, such intrinsic factors appear to be a more important factor for first

time career teachers. This is another example of how studies that only looked at one group of participants tend to highlight those factors as important to those groups when in fact the same factors may apply to all groups. Both first time teachers and career switchers are equally influenced by their previous experience in teaching to want to teach (Priyadharshini and Robinson-Pant, 2003; Lovett, 2007; Wang, 2019). As these are correlational studies, it is not possible to say if the causal direction could be reverse, that is, those who are interested in teaching are more likely to have prior teaching experience, rather than that prior teaching experience encouraged them to go into teaching.

In summary, the motivations for switching careers to teaching vary based on previous occupations and gender. Teaching being family friendly, which fits in with family commitments is important to women and career switchers. For those who do not have a fixed or confirmed profession, teaching is seen as offering greater job security.

3.5 Summary

The issue of teacher demand and supply is complex. Despite the importance and value of the teaching profession for the education of the next generation, recruitment and retention of teachers remains a challenge in England and many other countries. The number of teachers recruited has consistently been unable to meet the demand, and the level of teachers leaving the profession before retirement age is higher than that of other professions.

There are various factors identified in the literature which impact recruitment and retention. This chapter has explored these key factors. What it has found is that factors influencing both recruitment and retention are complex, of which many are interrelated.

There are also gaps in the research and questions which need further investigation with robust and rigorous research. For example, whilst there have been studies conducted in England on people's motivations to be teachers, these are not recent, nor conducted on a national scale (e.g., See, 2004). Prior to this thesis, no national study of teacher trainees

in England had been conducted. A more recent publication by Gorard et al. (2021) compared undergraduates' and teacher trainees' motivation and perceptions of teaching, but this study was published after my research had commenced. However, the study did not examine differences by routes into teaching, or trainee teachers' satisfaction with their choice and intention to stay in teaching – all of which are important when considering teacher recruitment and retention.

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SECTION B

METHODS OF DATA COLLECTION AND ANALYSIS

B.1 Introduction

The overarching aim of the study is to understand who chooses teaching and why. This helps to identify important factors that determine individuals' choice of teaching as a career so that more targeted strategies can be devised to get the right people into teaching who are more likely to stay. For this reason, this thesis considers individuals' motivations for choosing teaching as a career or not and their long-term professional plans and commitment to the profession. Understanding this will support the identification of appropriate strategies to attract and retain teachers.

This thesis is divided into three stages in order to effectively answer the overriding aim. Each stage has its own question and research design and methods to best answer the research questions. This is because there is no such thing as one good design - the suitability of a design depends on the research questions asked. And the same is true of the methods used (Gorard, 2021).

Stage one is the systematic review. A systematic review was considered the most appropriate design to summarise and synthesise existing international research to understand motivations of people to go into teaching and the influence of culture, economic and political factors. This helps to set the context for my primary research and to understand the kinds of research already conducted in other countries and the gaps in research in this area. It also provides an original contribution to the field of research as the first review of its kind to systematically assess the quality of the literature in terms of its trustworthiness.

Stage two seeks to understand motivations and perceptions of postgraduate trainee teachers in England. This was the first national longitudinal survey undertaken in this area, which followed trainees at the beginning of their training to the end of their training programme, and is therefore significant in its breadth. In addition, it built upon current literature by exploring the motivations and perceptions of men and women, trainees on different routes to teaching and career switchers and first career trainees. The reasons for the examination of findings across groups is to provide more clarity on how traditionally under-represented groups could be attracted into teaching, such as men, and those in other occupations. Knowing how and whether there are differences in the individuals who choose one route or the other is new knowledge which has not been previously examined.

Stage 3 looks at trainees' overall commitment to teaching. Few studies, if any, have interrogated trainees' career aspirations and their commitment to teaching. This was deemed important as understanding trainee teachers long-term teaching can help to address the question of retention. The study also took place during the Covid-19 pandemic which had significantly impacted teacher training as a result of school closures and the requirement for training to be online rather than in-person. The impact this had on professional plans is also investigated. This offers a new perspective on how disruptions to teacher preparation can influence their job satisfaction and long-term commitment to teaching. As with stage 2, findings are explored across gender, trainees on different routes to teaching and career switchers and first career trainees. Finally, the study followed trainees at the beginning of training to the end of their training to examine changes in career satisfaction levels and build and understanding of the trainee journey.

This section will first discuss the idea of positionality, the research questions, and then the methods of data collection and analysis that will address the overall research aims.

Positionality

My professional background and research interest were outlined in the introduction chapter. These were part of the reason why I chose to conduct this new study, alongside

clear gaps in the research which have also been explored. But, my professional background and interest in this topic were not important to how this research was conducted or what I found – and nor should they be. It is important that research findings are not influenced by individual's bias or prejudice as far as possible. This could potentially lead to misleading results and render the findings unfit for policy recommendations. For the benefit of readers who would like to know how my positionality has influenced my research, I offer an argument below to explain why the idea of positionality is not relevant here.

Positionality or reflexivity statements attached to social science research reports are growing and there are increasing pressure from some commentators for all reports to contain them. To maintain the integrity of research findings, researchers should not bow to such demands. They arise from the logic and limits of knowledge in the philosophy of science. However, adopting a position vis-a-vis knowledge production should arise from a clear understanding of the philosophy of science, not because it is in vogue to include them. This is a highly complex area of philosophy, and social science researchers are not also experts in this field. But, without being an expert there is no way to judge what one's position should be. Expecting reports to delve that deeply into one of the most important and complex areas of philosophy is not practical or achievable. Equally, it is highly probable that a few paragraphs are able to convey the complexity of the nature of knowledge and one's positionality. Positionality statements appear merely to encourage researchers to ignore the key ideal of impartiality. Impartiality is not helped by adopting a position. Positionality statements are anyway impossible to maintain because they are, presumably, bound by a positionality as well (Savolainen et al., 2023). They lead instead to an infinite regress (Boghossian, 2007).

The key point for research is that it answers a research question using the most appropriate method. Each study should be judged in terms of its quality or trustworthiness in answering that research question(s). Research cannot be simply ignored because it is from a different perspective as this would lead to bias. The full body of evidence cannot be assembled with appropriate weighting, if, that weighting, is substantially determined

not by what the research *was* but *which position* was chosen beforehand by the author (or reader). It would not then be possible to compare purportedly different kinds of research directly. If each perspective uses different criteria to judge the quality of any piece of research then we will not be able to have wide inter-rater reliability or agreement in judgements. This means evidence cannot be synthesised properly, to benefit the public who pay for it and whose lives may be affected by its use. This would be unethical. Instead, integrity of researchers, methodological transparency and judgements of rigours are relied upon. Positionality is therefore not needed to judge the quality of research or to interprete findings. Clear bias, attempts to deceive, and conflicts of interest might all be important (see below), but these are all to do with the conduct of research not the nature of knowledge.

Choices then about how to answer the research question need to be made based on the question asked and how best to answer it. Research should follow the question that is asked (no matter what it investigates or angle) and then the conclusions should be drawn from the research conducted (both in terms of its strengths and its limitations). Rigour is therefore not about ontology, epistemology or paradigms, but whether the methods chosen answer the research question well, and whether the claims that are made are warranted (Gorard, 2002).

Research questions:

Research question 1: Who chooses teaching as a career and why?

(a) What motivates people in different countries to go into teaching?

(b) How do people in different countries view teaching as a profession?

(c) Are there differences in motivational factors and perceptions of teaching between gender?

Research question 2: Why do postgraduate teacher trainees in England choose teaching as a career?

(a) Who are the trainees?

(b) What are their motivations?

(c) Do their motivations to teach differ by age, gender and training routes?
(d) What are their perceptions of the teaching profession in England?
(e) Do their perceptions of teaching differ by age, gender, career choice and training routes?
(f) How far do trainees experience social discussion and are they satisfied with their decision to teach?
(g) Do levels of social dissuasion and career satisfaction differ by age, gender, career choice and choice of route?

Research question 3: What are the levels of professional commitment and career engagement development aspirations of teacher trainees in England?

(a) How likely are they to stay in teaching?
(b) How satisfied are they with their career choice at the end of their training?
(c) What are their career development aspirations?

Research question 1: Who chooses teaching as a career and why?

The first research question is designed to examine international evidence on people's motivation and perceptions of teaching. It will consider the motivations and perceptions of those who are currently teaching, those who are training to teach and those who are still in school. People's reported motivations to teach may be different depending on whether they have already made the decision. For example, those who are in teaching or training to teach are likely to respond based on post hoc justification for their decision. Students still in school and undergraduates who have yet to make the decision, on the other hand, may be more open about their career decisions. This can shed light on what people look for in a career, and whether teaching fits in with their career plans. Understanding this is important as it can help decision makers to suggest appropriate policies to attract more people into teaching which are based on a more complete picture of motivations and perceptions of teaching career. By also reviewing evidence which includes those who have not yet chosen, or even decided against teaching, barriers to

teaching can be identified and thus a key group who are important to improve teacher supply can be targeted.

The review will also consider the motivations and perceptions of different groups of people. This is essential given that there are increasing difficulties in recruiting certain under-represented groups in teaching, such as males and ethnic minorities, especially in the primary/early years. This will support understanding of what motivates groups of people to choose teaching, thus enabling recruitment policies to target key factors which are influential to hard-to-recruit groups.

Finally, the review will also compare peoples' views across countries/regions. This helps to understand cultural issues relating to perceptions of teaching as a career. While some factors might not be relevant in particular contexts, international studies do reveal similarities and differences that may guide and inform teacher recruitment.

To answer the first research question, a systematic review and synthesis of international evidence was conducted. As explained above, the systematic review helps to set the context for the primary research. It identifies the kinds of research already conducted in other countries and the gaps in research in this area, for example, which questions have been answered, whether they been answered well and are the conclusions warranted. It provides the basis for my primary research. For example, none of the studies identified in the review looked at the long term decision of trainees, their commitment to teaching and their leadership aspiration. Previous reviews have also not synthesised studies from across cultures and nationalities, and none have systematically assessed the strength of the evidence in terms of its trustworthiness, and therefore, the question about what motivates people in different cultures to go into teaching remains to be answered.

Research question 2: Why do postgraduate teacher trainees in England choose teaching as a career?

This question looks specifically at postgraduate teacher trainees in England. While there have been previous studies already conducted in England, these have not been on a national scale and not recently (e.g., James and Chopin, 1997; See, 2004; Moreau,

2015). A more recent publication by Gorard, See and Morris (2022) compared undergraduates' and teacher trainees' motivation and perceptions of teaching, but this study was published after this research had commenced. However, they did not examine differences by routes of teaching, or trainee teachers' satisfaction with their choice.

To answer RQ2, a survey was undertaken of pre-service teachers at the start of their training via a full-time one-year postgraduate teaching qualification. This first survey used the Factors Influencing Teaching (FIT) Choice survey instrument developed by Richardson and Watt (2006) to measure participants' motivation in choosing teaching as a career. This survey has been used internationally (e.g., Watt & Richardson, 2008; Eren, 2012) and was used to collect information on participants' background characteristics as well as their motivations and perceptions across different training routes. The responses represent the views of the respondents at a particular point in time.

Research question 3: What are the levels of professional commitment and career development aspirations of teacher trainees in England?

Research question 3 examines English trainee teachers' professional commitment to teaching, their career aspirations and satisfaction with choice of teaching as a career. Given issues with retention of teachers, particularly in the first five years of teaching, exploring commitment to teaching, career satisfaction and career aspirations of trainee teachers at the end of their training career provides important knowledge that can support the development of retention initiatives in England.

To answer this research question, a second survey was administered at the end of the one-year training, using the Professional Engagement and Career Development Aspirations (PECDA) questionnaire (Watt & Richardson, 2008). This has been used in previous studies (e.g., Watt & Richardson, 2008; Eren, 2012). The second survey was to determine individuals' professional commitment to teaching, their career aspirations and future plans about teaching, as well as the impact of Covid-19. Responses to this survey

were compared with those in the first survey to examine whether and how trainees' career satisfaction has changed since they started their training programme.

Chapter 4
SYSTEMATIC REVIEW

One of the aims of this study is to understand why some people choose to teach and others do not. This chapter explains the rationale for conducting a systematic review for this purpose. It describes the method used to identify, review and synthesise studies from a systematic search of the usual educational, sociological and psychological databases.

4.1 Purpose

Attracting people to the teaching profession has been an important policy agenda for many countries for decades. Numerous studies have been conducted globally to understand people's motivation to be teachers, and how teaching is perceived in different countries. But hitherto there has been no rigorous and systematic synthesis of these studies. So far, there have been 2 reviews (Brookhart & Freeman, 1992; Heinz, 2015) but both have limitations.

Brookhart and Freeman's review (1992) was conducted three decades ago when the economic situation was different. This, together with increasing globalisation and free movement of people across the globe, and advancement in the technological industry means that people's career choice is now much wider. What was considered important in people's career choice then may no longer be relevant today. Heinz's (2015) review of 41 studies is more recent, but the majority of the studies (n =39) considered only the views of pre-service teachers - who had already made the decision to teach. Another crucial limitation in Heinz's (2015) review is that it did not discriminate evidence from studies with different designs, treating all evidence the same. Not all empirical work is of the same quality. Some may involve interviewing only five participants, some large surveys may have high attrition or based on local institutions. The findings from such studies can be biased due to self-selection of participants. Treating these studies the same as those that

used national or administrative data with regression analyses to tease out the key determinants is likely to lead to misleading results.

This review, therefore, considers the views of not only pre-service teachers, but also in-service teachers as well as those who have not made the decision (e.g., undergraduates and students in school). This information will provide a more complete picture as those who could be potential teachers will be included. What is unusual about the review in this thesis is that it considers the quality of all the studies and synthesises the findings of those that are of reasonable quality based on the research design and data quality.

Perhaps, it needs to be mentioned that the systematic review has been published (See et al., 2022) as part of a funded project. I assisted with the database search, screening and data extraction. I completed the thematic synthesis of the studies for this thesis, and contributed to the final report with the assistance of my supervisor. This review discussed here is the result of that piece of work.

4.2 Design

The objective of the review was to identify and synthesise existing international literature on the main factors influencing people's decisions to go into teaching or not, and their perceptions of the profession. This is to understand factors relevant to different groups of people, e.g. the influence of culture, economic and political climate.

Systematic reviews provide an objective and comprehensive summary of all available evidence (Petticrew & Roberts, 2006; Torgerson, 2003). They differ from the more traditional literature review in that the methods are explicit and open to scrutiny (Torgerson, 2003). As Wozney (2009) highlights, systematic reviews are:

- Driven by well-focused and feasible questions
- Employ explicit procedures or review protocols and methods for evaluating material
- Provide transparent descriptions of the methods used so that, in theory, others could reproduce the study and draw the same conclusions

- Operate as efficient information management tools by providing a way of reducing the volume of literature on a topic
- Are concerned with having practical value to the research community and other stakeholders (pp.43-44)

For these reasons, a systematic review was selected as the most appropriate design to identify, appraise and synthesise all relevant literature on the main factors influencing people's decisions to go into teaching or not, and their perceptions of the profession.

4.3 Search strategy

To ensure that the search was comprehensive and picked up as much relevant literature as possible, three searches were conducted using slightly different search terms. These were applied to known sociological, educational and psychological databases/search engines (EBSCOHost, ProQuest Dissertations and Theses, Google and Google Scholar). EBSCOHost includes databases such as ERIC, PsycInfo, PsycArticles, British Education Index and Education Abstracts. These searches were also supplemented by known studies.

- *Search 1*: The first search uncovered 126 potentially relevant records using the Boolean operators (("student* choice of teaching as a career") OR ("undergraduate* choice of teaching as a career") AND (factors) AND ("initial teacher education") OR ("initial teacher training")) AND (strategies or initiatives or schemes or policies))
- *Search 2*: A second search found 645 potentially relevant studies using these search terms (("teaching as a career") AND (student* or undergraduate* or "university students") AND (choice or decision)). Of these, 241 were duplicates and removed, leaving 404 imported records.
- *Search 3*: A search of Google Scholar obtained 286,000 results. The first 650 were viewed. The review process stopped here because after the next 5 pages or 50 articles no relevant reports were found. Of the 650 viewed, 101 were deemed relevant to the topic.

4.4 Screening

These studies were then exported to EPPI-Reviewer for screening. In any review, a broad search will pick up irrelevant materials. A number of records, which were not relevant but contained some of the keywords were found. To remove these, the title and abstract were screened, and studies were removed if they were clearly not relevant to the topic. Duplicated results were highlighted using the EPPI-reviewer duplicate function – these were checked, and duplicates deleted.

The next stage involved screening the full reports. This full-text screening involved summary-reading the studies and those thought not to meet the inclusion criteria were removed and the reason logged in EPPI-reviewer. The full texts of the included studies were screened by applying pre-defined inclusion and exclusion criteria as presented below.

Studies were included if they were:

- Empirical
- About school teaching
- About teaching in mainstream schools
- About pre-service, in-service, students in schools and undergraduates
- About attracting men and ethnic minorities into teaching
- Focused on choice or motivations or influencing factors relating to teaching as a profession
- About perceptions of teaching

Studies were excluded if they were:

- About attracting people to non-core subjects or subjects not traditionally considered as hard-to-staff (e.g., music, performing arts, hair dressing)
- Focused only on characteristics of individuals who choose teaching as a career rather than reasons for choice of teaching as a career

- Focused on outcomes that are not about teaching as a career, e.g., teaching competency or investment in teaching
- Not about classroom teachers (e.g., if they were about headteachers, teaching assistants or administrative staff)
- About teachers in higher education
- Not empirical, i.e., not research (e.g., government propaganda)
- Publications from practitioners reflecting on their views (e.g., opinion pieces)
- Not reported or published in English
- Published prior to 1990

Any studies believed not to meet the inclusion criteria were removed and the reason logged in to EPPI-reviewer. These studies were double screened with my supervisor to make sure that no relevant studies were inadvertently excluded.

The search was not restricted to any regions as the intention was to look at economic, political and cultural differences that might explain the choice of teaching as a career. However, the search was limited to those post 1990 as factors influencing peoples' choice of career or more specifically teaching as a profession may have changed over the last three decades. Nevertheless, some pre-1990 studies were included if they were seminal pieces or if the research was of a very high quality. (See Appendix 1 for list of included studies, and Appendix 2 for list of excluded studies)

4.5 Data extraction

Key information from each of the included studies was extracted and summarised using EPPI-Reviewer. The following screening template was used for each study:

- Country
- Main topic or research questions (e.g., motivations to teach or perceptions of teaching)

- Design (e.g., cross-sectional, longitudinal, case study/ethnographic, experimental/quasi-experimental)
- Research method for data collection (e.g., questionnaire survey, diary, administrative data)
- Sample (size of the sample, phase of education)
- Response rate/attrition
- Results (how the data are analysed and reported)
- Security of findings (each study is rated for strength of evidence)

4.4.1 Quality assessment protocol

Unlike previous reviews, this review considers the weight of the evidence of each of the studies included. This helps ensure that the findings are based on the most robust evidence.

The research and the trustworthiness of the findings were judged using the 'Gorard Sieve' (Gorard, 2014). The rating was based on five criteria:

- Design (whether the design is appropriate for the research question)
- Scale of study (how large the sample size is)
- Scale of missing data (how much of data is lost or missing, scale of non-response and attrition)
- Quality of data obtained (how the variables are measured, e.g., standardised, validated instruments, or self-reports)
- Other threats to validity (e.g., conflicts of interest, influence of researcher)

The ratings are based solely on the strength of the evidence based on these five criteria (Table 2).

Each study was awarded a star ranging from 0 (studies whose evidence is so weak that it is not worth considering) to 4* (studies whose evidence is considered most trustworthy). The procedure was to rate each of the five criteria and the final star awarded was based on the lowest classification achieved across the five categories. If it was not possible to

discern the quality of the study from the report, then the rating was placed in the lowest (0*) category. (See Appendix 1 for the full list of studies and ratings).

The most important criterion is the research design. This will depend on the research questions. As the research questions are correlational, the strongest design would be an observational study with appropriate comparators. These will be rated 4*. The sieve is to be read from left to right and top to bottom, starting with the research design. Moving across the scale, if the study has a large sample, then it stays as 4*. It will drop to 3* if it is a small-scale study. Moving along to the right, if there is no or low attrition, then it remains at 3*. If there is high attrition, e.g., over 15% then it drops a star to 2* and so on (this is a subjective judgement).

Studies using population data (i.e., national data) will be 4*, but if there is high level of missing data or non-response then it will drop a star. Similarly, if the study has a small sample, it drops a star, and another star is dropped in there is a high level of attrition.

The ratings can only move downwards and not upwards. For example, if the study has no comparators, then it starts with 3* and remains at 3* even if it has a very large sample and low attrition. As research on this topic invariably relies on participants' self-reports, responses are often not very reliable (e.g., responses can vary depending on when the surveys were administered and by whom), none of the studies were rated 4*.

Table 2: Criteria for judging the quality of research evidence

Design	Scale	Dropout	Data quality or Outcome	Other Threats	Rating
Fair design for comparison (e.g., RCT)	Large number of cases per comparison group	Minimal attrition with no evidence that it affects the outcomes	Standardised pre-specified independent outcome	No evidence of diffusion or other threat	4*
Balanced comparison (e.g., Regression Discontinuity)	Medium number of cases per comparison group	Some initial imbalance or attrition	Pre-specified outcome, not standardised or not independent	Indication of diffusion or other threat, unintended variation in delivery	3*
Matched comparison (e.g., propensity score matching)	Small number of cases per comparison group	Initial imbalance or moderate attrition	Not pre-specified, but valid outcome	Evidence of experimenter effect, diffusion or variation in delivery	2*
Comparison with poor or no equivalence (e.g., comparing volunteers with non-volunteers)	Very small number of cases per comparison group	Substantial imbalance or high attrition	Outcomes with issues of validity and appropriateness	Strong indication of diffusion or poorly specified approach	1*
No report of comparator	A trivial scale of study (or N unclear)	Attrition not reported or too high for comparison	Too many outcomes, weak measures or poor reliability	No consideration of threats to validity	0

4.6 Synthesising the evidence

To facilitate the synthesis, the studies were initially sorted by outcomes according to whether they were about motivations, perceptions, career satisfaction or deterring factors. Under each outcome, studies were classified by regions. Studies which also examined outcomes by phase of education, gender and ethnicity were classified. This helps to answer the question about what encourages or discourages certain groups from teaching so that targeted initiatives can be used to recruit teachers.

4.7 Summary

The purpose of this systematic review study was to synthesise the best evidence from existing research to understand why some people choose teaching while others do not. Answer to the latter question is essential to understanding how we can attract and retain currently under-represented groups, but often not considered in previous studies.

Relevant studies were identified by searching educational and sociological electronic databases. Grey literature was also located by searching Google and Google Scholar. Known pieces from previous reviews were also followed up. Identified studies were then screened for inclusion and exclusion using a set of pre-determined criteria. Duplicates and studies deemed not relevant to the research questions were excluded. Careful reading of the full text of included studies were made to extract key information about each study. Such information included the country of study, gender or ethnicity, curriculum of subject (if stated) and whether they were about motivations or perceptions. In addition, information about the study research design, the sample size, sampling strategy, level of attrition and other threats to validity were noted. To ensure that the evidence from the review was valid and trustworthy, each included study was appraised using the ‘Gorard sieve’ (2014). Extracted data were synthesised by outcomes according to whether they were about motivations, perceptions, career satisfaction or deterring factors.

Chapter 5
SURVEYS

As part of the study, the motivations and perceptions of pre-service teachers in England were examined. This was the first national study that also investigated post-choice career intentions, aspirations and commitment. The investigation was carried out using a survey questionnaire adapted from Richardson and Watt's (2006) FIT-Choice instrument and the PECDA instrument.

This chapter discusses the sampling strategy, the questionnaire instruments and the administration of the surveys. The final section of this chapter outlines the sampling frame and the sampling strategy.

5.1 Recruitment of participants

For this study, the target population was all post-graduate full-time trainee teachers in England, which was 29,314 students at the time of the study (ITT statistics, National Statistics, 2019-2020). However, given that contact information for these trainees was not available, consent was needed from initial teacher training (ITT) providers in order to access the desired target population as they were the gatekeepers for the potential participants.

In order to obtain as large a sample of the desired population as possible, the ITT allocations list 2019-20 (DfE, 2019) was used as a contact list; it listed all providers who had been given permission to recruit. It is important to note, however, that there are likely gaps and errors in such lists. Therefore, the list may not be a complete list of *all* providers in England (Gorard, 2001), so some potential participants may be missed. Efforts were made to reach out to providers that were not on the list by posting information on the survey in ITT associations' weekly bulletins. Gaining permission from providers to share the survey with their students was one of the biggest challenges of this study.

5.1.1 Stage 1

Once the list of providers was obtained, the first step was to contact all these providers featured on the Government publication of the ITT allocations (Department of Education, 2018). Contacts were made via email when a contact email address was provided on the website, or through an online form, and ITT providers were invited to participate in the two surveys. Survey 1 was sent out at the beginning of the academic year when trainees had just started their training. Their decision to join teaching would probably still be fresh in their minds. Survey 2 was administered at the end of the academic year after trainees had their practical training in schools and would shortly be graduating. The invitation included a brief explanation of the study and that it would involve emailing survey links to students at the beginning and end of their training year. Where it was possible to email a provider directly, the participant information sheet was also attached. At this stage, only 86 of the 231 providers contacted agreed to take part (37% response).

5.1.2 Stage 2

Due to the low number of providers who consented in the first phase, a second invitation email was sent to 142 providers who had not yet responded. This resulted in an additional 27 providers consenting. In addition to this, two ITT associations were contacted to include an invitation in their weekly bulletin sent out to ITT providers. From this, 3 providers requested further information and consented – one of which was not on the original ITT allocation list used.

In total, 116 providers consented, giving a provider response rate of 50%. This is one of the limitations of the study as low response from providers means that some potential trainees were not reached. This can cause substantial non-sampling bias. Table 3 summarises the results of the recruitment cycle in stages 1 and 2.

Table 3: Stage 1 and 2 of the recruitment cycle

Invitation email to providers	Number of providers on ITT allocations list 2019-20	231
	Number of providers contacted	231
	Number of providers consented	86
Second invitation email to providers	Number of providers contacted	142
	Number of providers consented	27
ITT Bulletin Notice to providers	Number of Bulletins	2
	Number of providers who contacted researcher for further information	3
	Number of providers consented	3
Total number of providers consented		116
Total number of participant responses		645

5.1.3 Stage 3

Stage 3 of the recruitment cycle took place after Survey 1 had been completed. This consisted of contacting the 116 providers who had *not* responded during the initial recruitment cycle, inviting them to participate in Survey 2. As with Stages 1 and 2, the invitation to participate also included information about the study, its aims and rationale. The providers who had agreed to participate in the first survey had already confirmed that they would participate in Survey 2.

An invitation was also posted in the weekly bulletins of two ITT associations. This was to try and reach out to providers another way as well as potentially recruiting providers not on the ITT list. No additional providers were recruited.

In addition, participants who had completed Survey 1 were asked to provide an email address should they consent to being contacted directly to complete Survey 2. This enabled direct email invitations for Survey 2 to be sent to participants who had completed

Survey 1 and had provided consent for direct contact. A summary of the recruitment process in Stage 3 is in Table 4.

Table 4: Stage 3 of the recruitment cycle

Invitation email to providers	Number of providers on ITT allocations list 2019-20	231
	Number of providers who had already provided consent	116
	Number of additional providers who provided consent	0
ITT Bulletin Notice to providers	Number of Bulletins	2
	Number of providers consented	0
Direct email invitation to participants who had provided an email in Survey 1		489
Total number of providers consented		116
Total number of participant responses Survey 2		762

5.2 The participants

The ITT statistics 2019-20 list (DfE, 2021) suggests that the total accessible population for the year that the survey was administered was 29,314 - although the exact figure at the time of the survey was not known as it had not yet been published.

The total number of participants recruited in the three cycles was 645 in Stage 1 and 2, and 762 in Stage 3. To see how representative my sample was, I compared my achieved sample for Survey 1 with the overall postgraduate ITT population (Table 5).

Table 5: Comparison of achieved sample in Survey 1 with overall postgraduate ITT population

Group	Achieved sample (%)	National student population (%)
Female	76%	71%
Degree class 2:1 or better	73%	74%
Aged under 25	36%	50%

**Source: DfE, ITT Census for 2019-20, England (revised figures for 2019-20 cohort).*

The table shows that the achieved sample for this study is similar to the overall postgraduate ITT student population's academic profile (degree class). However, there are more female students in the achieved sample than the national postgraduate ITT student population. My achieved sample students also appear older than the national student ITT student population (36% vs 50%).

5.3 Distribution of questionnaires

5.3.1 Survey 1

For Survey 1, questionnaires were distributed online via the teacher training providers. The link to the online survey was emailed to all 116 providers who had consented, along with an example email they could use. This was to minimize workload for the providers. The email included the Participant Information Sheet (Appendix 2) and the Privacy Notice (Appendix 3).

A follow up email was sent a few weeks later to ask the providers to send a reminder to students to complete the survey. The number of students on roll was also requested so that a record of the potential number of respondents could be calculated. In addition to the 116 providers who consented, the survey link was emailed to another 5 providers who had responded that they would look into participating in the study. None confirmed whether the link was sent.

Out of the 116 providers who consented, all confirmed that they had sent the link to their students. Fourteen providers did not confirm the number of students on roll, with a further four only confirming partial cohort numbers (e.g., confirming students in one of the three secondary subjects). There could also be further incomplete figures as not all providers provided a breakdown of cohort numbers. For example, some providers who had both primary and secondary cohorts submitted one figure; there may be instances where this might be the number for only a phase cohort.

5.3.2 Survey 2

For Survey 2, distribution was again through the providers. The email included an updated Participant Information Sheet (Appendix 5) and the Privacy Notice (Appendix 4). Also, where participants in Survey 1 have agreed to take part in the second survey, they were contacted directly. In total, 489 participants were contacted directly. For the second survey, only a few providers confirmed distributing the survey, which potentially affects the quality of the data collected.

5.4 Response rate

Calculating the response rate was challenging as there were inconsistencies in the way the training institutions provided the number of pre-service students on roll. It is also not known whether the five providers to whom the link was sent to, had shared the link with their students. It is therefore difficult to work out exactly how many pre-service teachers were sent the survey link.

Response rate was therefore calculated using the number provided by the gatekeepers. Where information was not provided, an estimate of the cohort size was obtained from the providers' website. This was, on the whole, unsuccessful. The five providers who did not confirm either way were not included in the count.

Based on the information known, the potential number of participants is estimated as 6,487. The response rate was therefore 9% for Survey 1 and 12% for Survey 2. This is a

very low response rate, but it can only be a crude estimate as the number of providers that actually sent out the survey links is unknown, and the number of emails sent out by each provider is also unknown. While providers may have agreed to take part in the study, this does not mean that actually emailed the survey links to their students.

5.5 Rationale for the use of surveys

Questionnaires are a widely used technique to elicit attitudes, perceptions, and preferences of a large number of respondents (Newby, 2014). Although other methods, such as interviews, enable more in-depth information to be gathered, there are limitations such as the time taken and the number of participants who can be involved. Survey questionnaires are therefore an efficient way to reach a large number of participants in a relatively short period of time. Another advantage of the questionnaire survey is that it can be completed anonymously thus minimising the tendency to give socially desirable answers. It also ensures consistencies in the way the questions are asked.

A limitation of questionnaires is that the questions may be misinterpreted or interpreted differently by participants. Questions can also be ambiguous. All this can affect the validity and reliability of the data obtained. For this reason, two questionnaires that have been validated and are widely used in different contexts in several countries were used. This gives some level of confidence. Even so, I found a number of limitations with the questionnaires. These will be discussed in later chapters.

5.5.1 Survey 1: FIT-Choice questionnaire

Survey 1 uses the Factors Influencing Teaching (FIT)-Choice questionnaire in its original configuration, with written permission from Helen Watt, the original author of this instrument (personal communication, February 16, 2019).

The FIT-Choice instrument was deemed appropriate as it has been tested in a number of contexts and is viewed as a robust scale to measure the motivations for pursuing a teaching career (Watt & Richardson, 2007; Watt & Richardson, 2012). It is relevant to the

second research question. Although the scale has been used across various contexts, to date, the full version of the instrument has not been used or tested in the English context.

The questionnaire comprised six sections. **Section 1** is where the participant information and privacy notice were shared with the participants to ensure that they understood the focus of the survey and how their data would be collected. It was the same information sent to providers but was included for the participants' information in case providers had not shared at the time they sent out the link.

The following sections (Sections 2-4) followed the same format as the original FIT-Choice Scale. Section 5, which collected background information and characteristics was adapted for this research. (See Appendix 6 for the survey question items).

Sections 2 and 3 assessed influential factors affecting choice of teaching. Section 2 presented participants with an open-ended question: "Please briefly state your main reason/s for choosing to become a teacher." Section 3 then presented items to examine the factors influencing teaching as a career. Respondents were asked to rate the importance of each factor on a seven-point Likert scale ranging from 1 (not at all important) to 7 (extremely important).

Section 4 concerned teacher trainees' perceptions of the teaching profession in England and contained 17 items. These are also on a seven-point Likert scale where respondents rate their strength of agreement from 1 (not at all) to 7 (extremely).

Section 5 measured participants' career choice satisfaction by three items with response options from 1 (''not at all'') through 7 (''extremely''). As part of this section, participants also rated the extent to which they had experienced social dissuasion from teaching as a career choice.

Section 6, the final section, contained nine questions to elicit demographic and background data. These questions were specifically designed for the English context and

this survey did not follow the same structure of the original FIT-Choice Scale. The first four questions asked for information about which route into teaching the participants were training to teach, why they chose this route, the phase they were training to teach, and the qualification awarded.

Respondents were also asked for information about both their gender and age. Information relating to gender was deemed important considering the over-representation of females in teaching. A number of studies suggest that teaching is more appealing to women.

Questions 12 and 13 were about participants' academic achievement i.e., degree classification (first class, upper second class etc.). Studies suggest that those who choose teaching tend to have lower educational qualifications (Gorard et al., 2021). The question regarding degree classification also would enable a comparison with national data to see how representative the sample was.

Question 14 asked respondents whether teaching was their second career, and if so, what their previous career was. The question relating to participants' previous career proved challenging due to the wide range of possible responses. The decision was made to use the Standard Occupational Classification (SOC) which is used by the UKs Office for National Statistics. Respondents selected one of the 9 major groups presented: Manager, director or senior official; Professional occupation; Associate profession / technical occupation; Administrative / secretarial occupation; Skilled trade occupation; Caring / leisure / other service occupation; Sales / customer service occupation; Process, plan or machine operative; Elementary occupation.

Questions 15, 16 and 17 were optional and asked for name and email address and whether the participants consented to being contacted for follow up questions and Survey 2 to be sent directly to them. The final question, 18, asked respondents to provide a code (based on a set of criteria) that could be used to match their data anonymously should they also complete Survey 2 at the end of the year.

5.5.2 Survey 2: Professional Engagement and Career Development Aspirations (PECDA) Scale

The Professional Engagement and Career Development Aspirations (PECDA) questionnaire measures trainee teachers' professional plans. The items were grouped under four factors: planned effort, planned persistence, professional development and leadership aspirations. Respondents were asked to rate their responses to items on a seven-point scale ranging from 1 (not at all) to 7 (extremely). Survey 2 questionnaire is in Appendix 7.

In addition, respondents were asked about their future professional plans: "I do not want a teaching career"; "I want to teach in the short term but later want to pursue a different profession"; or "I want my whole career to be in the teaching profession". Those who indicated they did not want to teach were asked to explain why and indicate their desired career in an open-ended question. Respondents who wanted to teach in the short-term were asked to explain their reasons for this, and also what career they were planning to pursue instead. Those who indicated that they wanted their whole career to be in teaching were asked to explain why this was the case. Due to the Covid-19 pandemic in March 2020, the survey also asked participants whether their career plans had changed as a result of this and to explain how.

Along with the use of the PECDA questionnaire, respondents were asked about their career choice satisfaction again, as in Survey 1. This was to assess whether their initial intention to be a teacher had changed over time.

5.6 Conclusion

The samples for both Survey 1 and 2 involved trainee teachers on a one-year postgraduate teacher training course in England. Survey 1 included 645 trainee teachers and Survey 2 included 762 trainee teachers. Most of these are the same teachers who

agreed to take part in the second survey. 492 indicated that they had completed Survey 1.

The sample showed an over-representation of female students and under-representation of those aged under 25. With regards to academic background, the sample demonstrated a similar profile to the general teacher trainee population.

A major challenge of the study was recruitment and response rate. The overall response rate could not be calculated accurately as there was no way of finding out how many providers had actually shared the survey link with their students, and how many students these providers contacted. However, based on the size of each cohort in each provider, a rough estimate of the response rates for Survey 1 was 9% and for Survey 2, 11%. This low response could be due to a number of reasons: providers failing to email the survey link to participants; refusal to complete from the participants; or non-response to the invitation email.

Chapter 6
DATA ANALYSIS: PRIMARY RESEARCH

This chapter describes the procedures involved in analysing the survey data. As highlighted in B.1, decisions about the research design and the methods of data collection to answer the research questions were determined by the questions asked and the most appropriate method to answer them. This is the same for the analysis.

6.1 Survey 1

6.1.1 The pilot

Prior to the research commencing, the questionnaire for Survey 1 was piloted with three ECTs (Early Career Teachers) and two prospective teachers to test the survey link, the content of the questionnaire (whether the language was clear or was there any ambiguity) as well as the format of the survey. The survey links worked for all participants. All five participants agreed that the wording of the questions was clear and it was user-friendly.

6.1.2 Data preparation

All the data in the surveys was analysed using SPSS software (version 27). The first stage in the analysis was to prepare the data to facilitate analysis. This involved checking for missing data. Contrary to some studies where missing data is omitted, all cases in this study were retained. But it is acknowledged that missing values are not simply random. Reasons for missing values may be not wanting to answer the questions posed or not wanting to rate how true a statement is.

Where there were missing cases in the personal data which included teacher characteristics and information on route and career choice (these mainly accounted for less than 1%), they were included in one of the data groups. For example:

- For Highest Qualification, responses are coded as: u*ndergraduate degree* and *higher*. ”Higher” includes masters, doctorate, other, and those did not answer the question (0.5%), as well as participants who ticked multiple options.

- For the question on Second Career, the responses are coded as: *yes*, and *not yes*. *Not yes* includes those who ticked “no” as well as 1 participant who ticked both and 2 participants who did not answer (0.5%).
- The variable Age is collapsed into three groups: *18-24*, *25-44* and *other* (including age groups 45-64, 55-64 and not indicated).
- For Gender, responses were initially coded as *female and not female*. Those who did not answer or ticked other/prefer not to say were so grouped into the *not female* category as the numbers were small and would mean data was not lost. The data was analysed with the missing cases included and then again without them included. This made no difference to the overall results. They will therefore be referred to as ‘male’ throughout the text
- For the variable Phase of Education, responses are coded as *primary* and *not primary. Not primary* includes those who indicated *secondary* and those who did not select an answer.

To prepare the data for analysis, the number of variables also need to be reduced as they were deemed unwieldy. In the case of this study, this process was necessary as there were only 645 respondents and 57 items, meaning that there would be only between 10 and 11 cases for each item. The recommended threshold often cited is a minimum of at least 10 times as many cases as variables (Gorard, 2021). This point is rarely considered in previous research which adopts the FIT-Choice instrument.

I adopted the full version of the FIT-Choice instrument (see Appendix 6) to maintain the integrity of the instrument. However, on closer inspection it appeared that a number of questions asked for the same information in different ways. For this reason, it was felt that the number of items could be reduced by grouping those that measure similar constructs together using Principal Components Factor Analysis (PCA). This helps to simplify the dataset by reducing the number of variables for subsequent analysis whilst also attempting to retain important variation (Gorard, 2021).

Principle Components Factor Analysis was used for all data reduction with varimax rotations, making the factors as independent of each other as possible. Scree plots and the variance explained by each added factor was used to determine the number of components to be retained. Following this, the rotated component matrix was used to illustrate which items with the highest loadings were grouped together for each factor. Only items with values above 0.6 were retained.

Principal Components Factor Analysis (PCA) was conducted for items that measure trainee teachers' motivations, perceptions and career satisfaction. The decision was taken to choose one item to represent each of the factors by choosing the item with the highest loading. Any subsequent research carried out would use just this item to represent the factor.

Below is an explanation of how the question items for each construct were reduced for motivations and then perceptions.

Motivations

For items measuring trainee teachers' motivations, the scree plot (Figure 13) shows that only three items explained most of the variance. As the graph begins to flatten out after 9, the variance explained by each added factor (Table 6) stopped at 9 factors with the model retaining 67% of the variation. It is, therefore, decided to keep the first 9 factors.

Figure 13: Scree plot for motivations

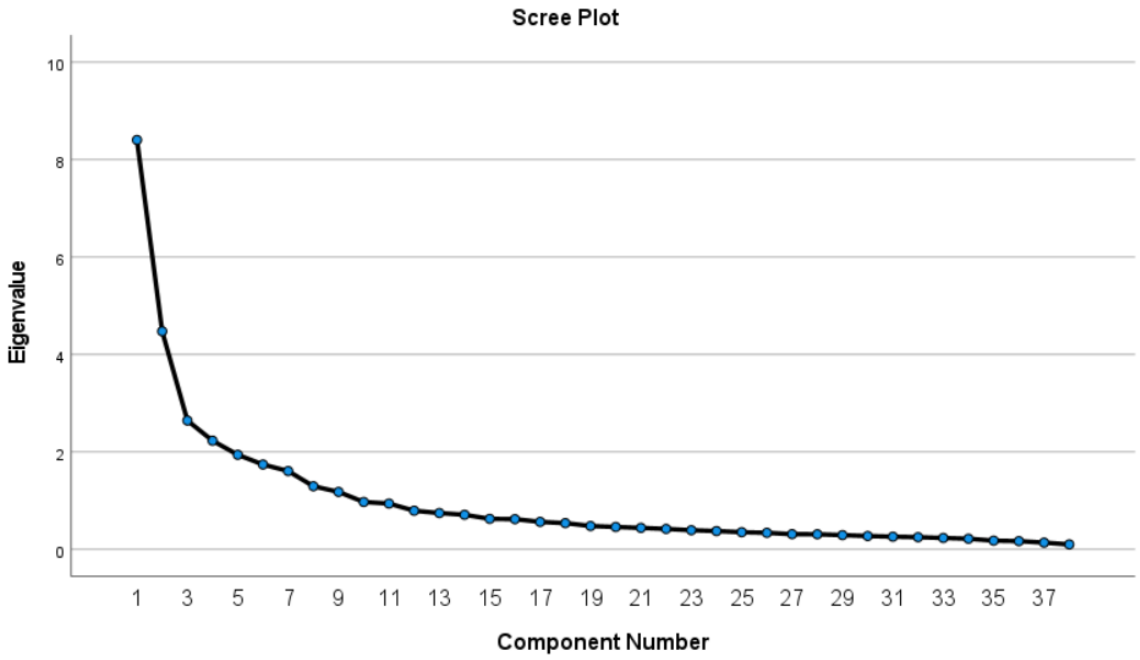


Table 6: Survey 1 Motivations - % of variance explained by each factor

Factor	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.114	13.458	13.458
2	3.151	8.293	21.752
3	2.878	7.575	29.327
4	2.730	7.184	36.511
5	2.726	7.174	43.685
6	2.435	6.407	50.092
7	2.403	6.325	56.417
8	2.183	5.744	62.161
9	1.893	4.982	67.143

The rotated component matrix (Table 7) lists all items from the survey and the nine proposed components that underlie them. Values less than 0.6 are excluded. Each of the nine factors were labelled according to the common theme they share within each factor. For example, Factor 1 included items that measured contribution to society as a common theme, so the factor was therefore labelled *Social Contribution*. The item with the highest loading was “Teaching will allow me to benefit the socially disadvantaged” so this was chosen to represent the factor. The nine factors extracted and the single items for the factors are:

Factor 1: Social contribution

- Description: Want to make a difference to society
- Item: Teaching will allow me to benefit the socially disadvantaged

Factor 2: Work with children

- Description: Desire to work with children
- Item: I want a job that involves working with children/adolescents

Factor 3: Innate interest in teaching

- Description: Interest in the activity of teaching and that skill match the job requirements
- Item: I have good teaching skills

Factor 4: Positive school experience

- Description: Positive past experiences of teaching and learning
- Item: I have had inspirational teachers

Factor 5: Job security

- Description: Good job security and stability
- Item: Teaching will be a secure job

Factor 6: Social influence

- Description: Influenced by other people to teach
- Item: My friends think I should become a teacher

Factor 7: Family friendly

- Description: Family friendly career option

- Item: Teaching hours will fit with the responsibilities of having a family

Factor 8: Fallback

- Description: Fall-back / second choice career
- Item: I was not accepted into my first-choice career

Factor 9: Job flexibility

- Description: Job location flexibility / transferability
- Item: Teaching may give me the chance to work abroad

Table 7: Factor loadings for items measuring motivations

Question items	Component								
	1	2	3	4	5	6	7	8	9
Teaching will allow me to benefit the socially disadvantaged	.81								
Teaching will allow me to work against social disadvantage	.79								
Teaching will allow me to raise the ambitions of underprivileged youth	.79								
Teaching allows me to provide a service to society	.74								
Teaching enables me to 'give back' to society	.72								
Teachers make a worthwhile social contribution	.69								
Teaching will allow me to have an impact on children/adolescents	.65								
Teaching will allow me to influence the next generation	.63								
Teaching will allow me to shape child/adolescent values									
I want a job that involves working with children/adolescents		.83							
I want to work in a child/adolescent-centred environment		.83							
I like working with children/adolescents		.80							
I have good teaching skills			.83						
I have the qualities of a good teacher			.75						
Teaching is a career suited to my abilities			.68						
I like teaching			.63						

I am interested in teaching						
I have had inspirational teachers	.90					
I have had good teachers as role models	.90					
I have had positive learning experiences	.75					
I've always wanted to be a teacher						
Teaching will be a secure job		.84				
Teaching will provide a reliable income		.82				
Teaching will offer a steady career path		.77				
My friends think I should become a teacher			.88			
My family think I should become a teacher			.84			
People I've worked with think I should become a teacher			.82			
Teaching hours will fit with the responsibilities of having a family				.81		
School holidays will fit in with family commitments				.78		
Part-time teaching could allow more family time				.72		
As a teacher I will have a short working day						
As a teacher I will have lengthy holidays						
I was not accepted into my first-choice career					.75	
I chose teaching as a last-resort career					.74	
I was unsure of what career I wanted					.68	
Teaching may give me the chance to work abroad						.85
A teaching job will allow me to choose where I wish to live						.74
A teaching qualification is recognised everywhere						

Having reduced the number of items measuring motivations, the following section explains how the number of items for perceptions was reduced.

Perceptions

Similarly for items measuring perceptions, PCA was also used to reduce the number of items to pick out the key factors. As before, the scree plot was used to determine the number of factors to be retained for items that measure trainee teachers' perceptions of teaching (Figure 14). Although the graph looks like it begins to flatten out after 6, the variance explained by each added factor (Table 8) stops at 4 factors with the model retaining 70% of the variation. It is, therefore, decided to keep the first 4 factors.

Figure 14: Scree plot for perceptions

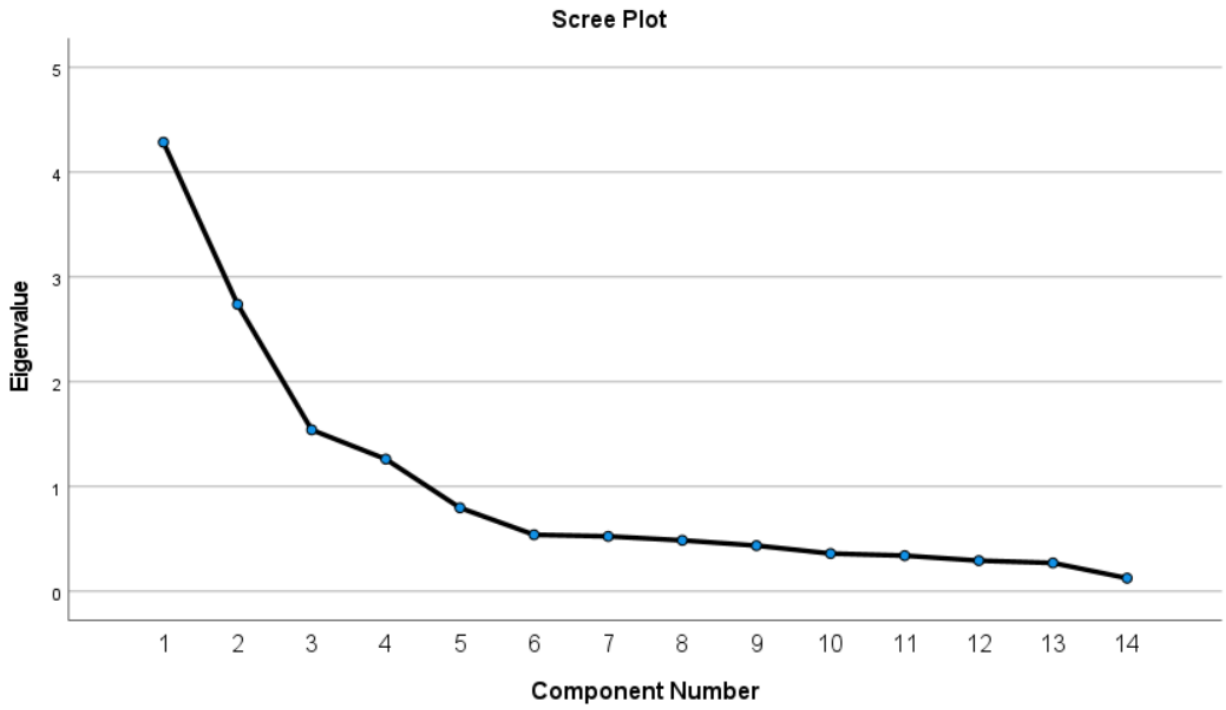


Table 8: Survey 1 Perceptions - % of variance explained by each factor

	Rotation Sums of Squared Loadings		
Components	**Total**	**% of Variance**	**Cumulative %**
1	3.625	25.890	25.890
2	2.256	16.114	42.004
3	2.028	14.484	56.488
4	1.919	13.706	70.194

The rotated component matrix (Table 9) lists all items from the survey and the four proposed components that underlie them. Values less than 0.6 are excluded. As with motivations, each of the four factors were labelled according to a common theme. The four factors extracted and the single items to represent each factor are:

Factor 1: Social status

- Description: Value and status of the profession
- Item: Do you believe teaching is a well-respected career?

Factor 2: Expertise

- Description: Knowledge and skill required
- Item: Do you think teachers need highly specialised knowledge?

Factor 3: Demand

- Description: Demands of the job
- Item: Do you think teaching is emotionally demanding?

Factor 4: Salary

- Description: Salary levels
- Item: Do you think teachers earn a good salary?

Table 9: Factor loadings for items measuring perceptions

	Component			
	1	2	3	4
Do you believe teaching is a well-respected career?	.83			
Do you believe teaching is perceived as a high-status occupation?	.83			
Do you think teachers feel their occupation has a high social status?	.78			
Do you think teachers feel valued by society?	.78			
Do you believe teachers are perceived as professionals?	.73			
Do you think teachers have high morale?				
Do you think teachers need highly specialised knowledge?		.89		
Do you think teachers need high levels of technical knowledge?		.85		
Do you think teaching requires high levels of expert knowledge?		.80		

Do you think teaching is emotionally demanding?	.80	
Do you think teachers have a heavy workload?	.80	
Do you think teaching is hard work?	.79	
Do you think teachers earn a good salary?		.92
Do you think teaching is well paid?		.91

Having reduced the number of items measuring perceptions, the next section explains how PCA was used to reduce the items for career satisfaction.

Career satisfaction

The scree plot (Figure 15) demonstrates the amount of variation in the responses that can be explained by each underlying factor. As the graph begins to flatten out after 4, and the variance explained by each added factor (Table 10) stops at 2 factors with the model retaining 67% of the variation, 2 components are deemed appropriate.

Figure 15: Scree plot for career satisfaction

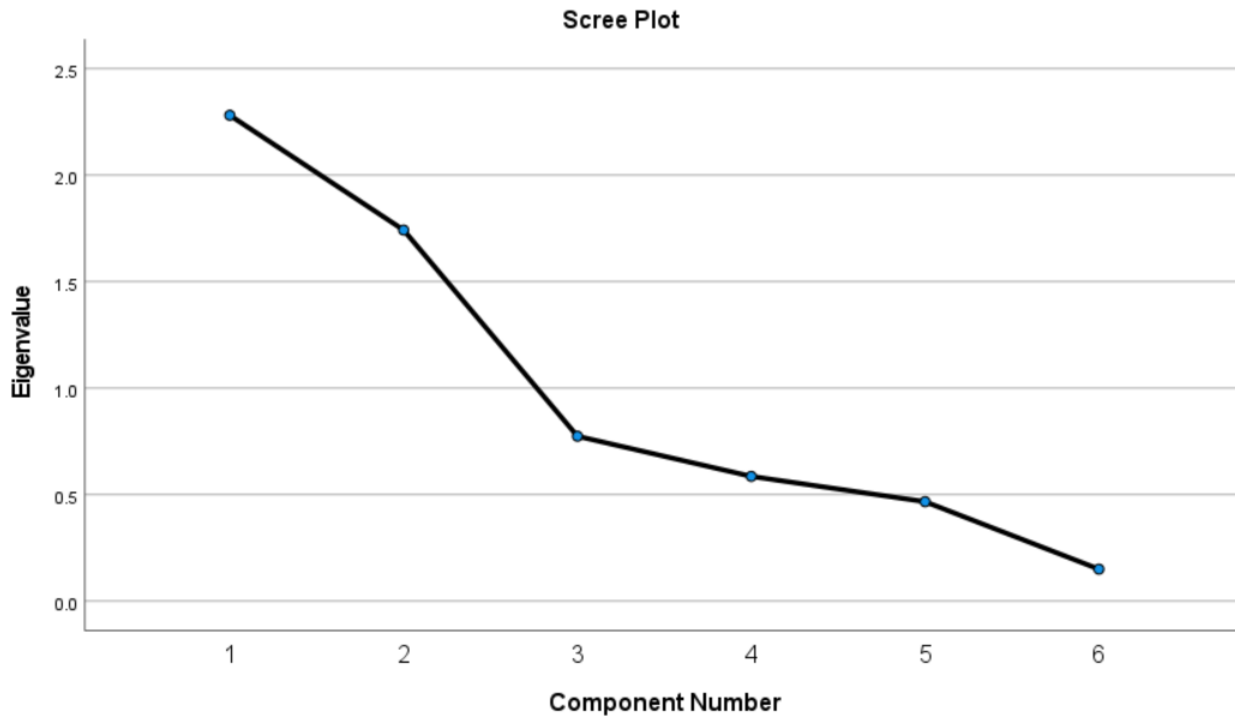


Table 10: Career Satisfaction - % of variance explained by each factor

Components	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.275	37.910	37.910
2	1.749	29.145	67.055

The rotated component matrix (Table 11) lists all items from the survey and the two proposed components that underlie them. All values were above 0.6 so none needed to be eliminated. The two factors extracted and the single items to represent each factor are:

Factor 1: Satisfaction

- Description: Satisfaction with career choice
- Item: How satisfied are you with your choice of becoming a teacher?

Factor 2: Social dissuasion

- Description: Influence of others on decision/motivation to teach
- Item: Did others influence you to consider careers other than teaching?

Table 11: Factor loadings for items measuring career satisfaction

Items	Component	
	1	2
5.3. How satisfied are you with your choice of becoming a teacher?	.92	
5.5. How happy are you with your decision to become a teacher?	.91	
5.1. How carefully have you thought about becoming a teacher?	.75	
5.6. Did others influence you to consider careers other than teaching?		.83
5.2. Were you encouraged to pursue careers other than teaching?		.77
5.4. Did others tell you teaching was not a good career choice?		.66

6.1.3 Analysing participant characteristics

Once data reduction was complete, the next stage was to do a simple frequency count to describe the characteristics of the respondents. Characteristics of the participants in the study were compared with those in the national statistics, where available, to see if the sample was representative of the general student population.

6.1.4 Analysing trainee teachers' motivations and perceptions of teaching

To estimate trainee teachers' motivations, perceptions and their career satisfaction, the mean responses for each of the factors using the item with the highest loading to represent that factor (as explained in Chapter 6.1.2) was calculated.

6.1.5 Comparing responses of different groups

To see if there were differences in responses between sub-groups of trainees (age, gender, career choice and choice of route), effect size was used to estimate the difference. Effect size is the standardised mean difference between groups, as expressed below.

Cohen's *d* effect size was used using the following formula:

$$\frac{\text{Mean of Group 1} - \text{Mean of Group 2}}{\text{Overall standard deviation for the two groups}}$$

As an example, the following formula is used to summarise differences in motivations on different training route: university-led or school-led:

$$d = \frac{M_{ul} - M_{sl}}{S_o}$$

where:

d = Cohen's *d*

M_{ul} = Mean of university-led group

M_{sl} = Mean of school-led group

S_o= Overall standard deviation of both groups

In this example, the university-led group is the reference group.

Previous studies have invariably used significance tests, such as ANOVA, chi-squares or t-tests, to compare groups. This is incorrect and can lead to misleading results as the p-value in significance tests do not and cannot tell us whether there is a difference between two groups or how big the difference its. This is a very common misunderstanding. The p-value simply means, if we assume there is no difference between the two groups, how likely are we to get the observed results by chance. This is not the same as the probability that the two groups are different by chance or random sampling (Gorard, 2021; Colquoun, 2014; 2016; Trafimow & Rice, 2009) - a common misunderstanding. Another essential assumption of tests of significance is a complete random sample, with no non-response or missing cases. For these reasons, it would not be appropriate to use any of the variations of tests of significance.

6.2 Survey 2

6.2.1 The pilot

As with Survey 1, Survey 2 was piloted with three ECTs (Early Career Teachers) and two prospective teachers. These were not the same participants for the pilot for Survey 1. Participants were sent the survey link and were asked for feedback on the content and formatting of survey.

The survey link worked for all participants. All five participants agreed that the wordings of the questions were clear and user-friendly. One participant highlighted a formatting error on one of the questions; this was corrected before the survey was distributed to the research sample.

6.2.2 Data preparation

As with Survey 1, all data was analysed using SPSS software (version 27). While the PECDA instrument has been used in many previous studies, a number of questions asked for the same information. The items were reduced by grouping those that measure similar constructs together using Principal Component Factor Analysis (PCA).

PCA was used for all data reduction with varimax rotations, making the factors as independent of each other as possible. Scree plots and the variance explained by each added factor was used to determine the number of components to be retained. Following this, the rotated component matrix was used to illustrate which items with the highest loadings were grouped together for each factor. Only items with values above 0.6 were retained.

Principal Components Analysis (PCA) was conducted for items that measure trainee's professional plans and aspirations. As with the FIT-Choice Scale instrument, the decision was taken to choose the item with the highest loading to represent each of the factors. Subsequent research would use just this item to represent the factor.

The scree plot (Figure 16) shows that three items explained most of the variance. As the graph begins to flatten out after 4, and the variance explained by each added factor (Table 12) stopped at 4 factors with the model retaining 81% of the variation, the first four factors were decided.

Figure 16: Scree port for Survey 2

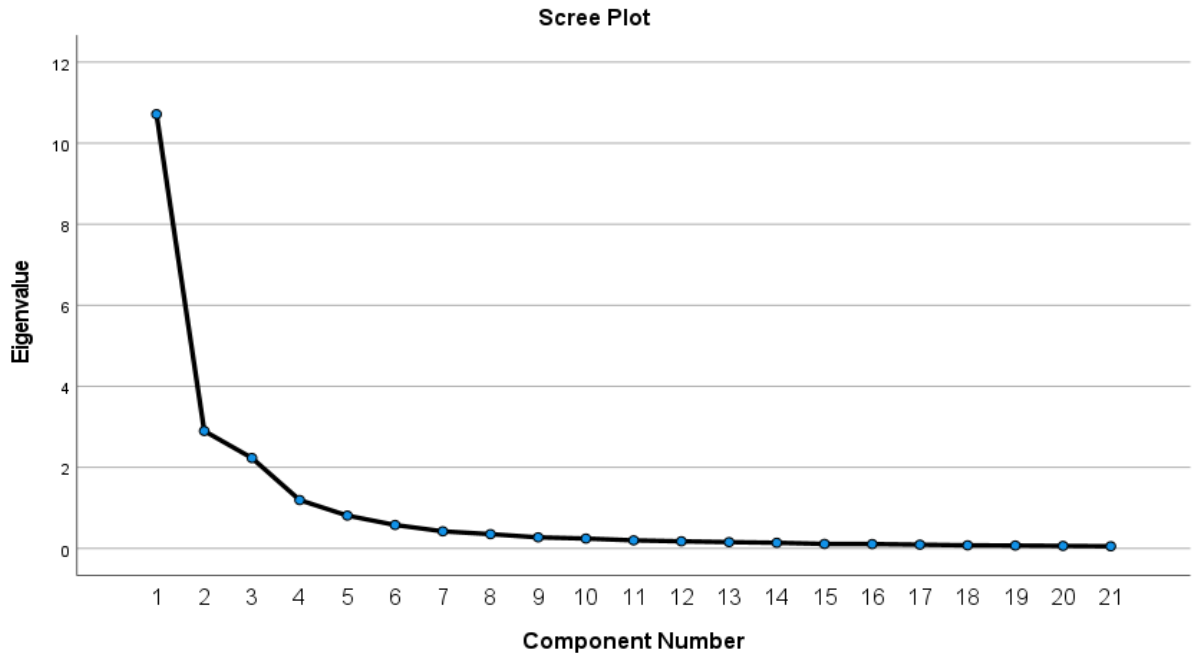


Table 12: Survey 2: Distrubution of the variance % of variance explained by each of the factors

Components	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	6.146	29.266	29.266
2	3.760	17.904	47.169
3	3.623	17.252	64.421
4	3.518	16.752	81.174

The rotated component matrix (Table 13) lists all items from the survey and the four proposed components that underlie them. Values less than 0.6 are excluded. The four factors identified were labelled based on common themes identified and the items with the highest loading was used to represent them:

Factor 1: Planned persistence

- Description: Persistence in the teaching profession
- Item: How confident are you that you will stick with teaching?

Factor 2: Leadership aspirations

- Description: Intention to be a leader in school
- Item: To what extent do you aim to take up a leadership role in schools?

Factor 3: Planned effort

- Description: Intentions to be a quality teacher
- Item: How hard will you strive to be an effective teacher?

Factor 4: Professional development aspirations

- Description: Intentions to continue to develop as a professional
- Item: To what extent do you aim to participate in professional development courses?

Table 13: Factor loadings for items measuring commitment and aspirations

	Component			
	1	2	3	4
How confident are you that you will stick with teaching?	.91			
How sure are you that you will stay in the teaching profession?	.90			
How sure are you that you will persist in a teaching career?	.88			
How certain are you that you will remain in teaching?	.88			
How content are you with your choice of a teaching career?	.82			
How happy are you with your decision to become a teacher?	.82			
How satisfied are you with your choice of becoming a teacher?	.81			
How carefully have you thought about becoming a teacher?				
To what extent do you plan to take up a leadership role in schools?		.94		
To what extent do you plan to reach a position of management in schools?		.93		
To what extent do you plan to have leadership responsibility in schools?		.91		
To what extent do you plan to seek a staff supervision role in schools?		.88		
How hard will you strive to be an effective teacher?			.82	

How much effort will you put into your teaching?	.82	
How much will you work at being a good teacher?	.81	
How much effort do you plan to exert as a teacher?	.81	
To what extent do you plan to participate in professional development courses?		.85
To what extent do you plan to undertake further professional development?		.83
To what extent do you plan to learn about current educational developments?		.77
To what extent do you plan to continue to acquire curriculum knowledge?		.66
To what extent do you plan to continue learning to improve your teaching skills?		.63

6.2.3 Analysing commitment and engagement with the teaching profession

Once data reduction was complete, a simple frequency count to present how likely the participants are to stay in the teaching profession was calculated. Non-numeric data from the open-ended questions were used to explain reasons why participants wanted to stay in the profession in the long-term, short-term or not at all. Analysis of this was done by identifying recurrent themes which were then colour coded.

The next stage was to do a simple frequency count and percentages of the four factors identified in data reduction as well as the first question which explored their planned persistence in more detail.

6.2.4 Analysing career satisfaction

Next, the mean for career satisfaction ratings were calculated. The same item which was used in Survey 1 to represent this was used for this analysis: “How satisfied are you with your choice of becoming a teacher?” Mean and standard deviation was calculated and presented.

To determine whether career satisfaction had changed across the training year, data from Survey 1 and 2 was matched. Out of the 761 who responded to Survey 2, 492 indicated that they had completed Survey 1. The reason for these missing cases could be due to dropout or attrition, where cases changed their mind or were prevented from completing Survey 2 due to various circumstances. Another reason could be that some participants had dropped out of their teaching qualification between surveys; this is a missed opportunity to survey participants who had started a teaching qualification and decided not to continue.

Out of the 492 who indicated that they had completed survey 1, only 330 could be successfully matched. Cases were matched by a combination of their matched code, name and email addresses. Where cases could not be matched by these details, they were deleted for the matched analysis.

6.3 Summary

As made clear in B.1, research needs to be conducted with clarity and transparency. This chapter has outlined the procedures involved in analysing the survey data. How missing cases were dealt with has been explained, how the different data were analysed has been outlined and responses compared. The methods of data collection, analysis and synthesis of the findings were informed by the data, the research questions and the research objectives rather than my subjective or personal position, as the aim of my research is to find answers to the research questions in an objective way.

Throughout, careful consideration of the sample and the data collected informed the analysis. For example, as the two surveys used in this thesis were existing instruments, PCA was used to let the data, rather than theory, determine how many factors there should be (Gorard, 2021). To see whether there are differences in the motivation between groups, effect sizes rather than significance tests, such such as ANOVA, chi-squares or t-tests were used. Tests of significance are not appropriate because the sample was not

random. This is the fundamental assumption in significance tests. And even if the sample was random, tests of significance would still not be appropriate as they do not give the answer that we want, that is, whether there is a difference between sub groups of individuals. What significance tests can tell us is how likely we are to get the results that we do, assuming that there is no difference between groups (probability of the data given the hypothesis). But what researchers want to know is whether there is any difference between groups given the data (probability of the hypothesis given the data). Significance tests do not and cannot provide answer to the latter. Effect sizes were therefore used to compare groups. The kind of data available determines the method of analysis.

SECTION C

THE FINDINGS

C.1 Overview

The overarching aim of the study is to understand who chooses teaching and why. This section presents an analysis of findings from the systematic review (Chapter 7) and the primary research Q1 (Chapter 8) and Q2 (Chapter 9).

To recapitulate, the research questions for each are as follows:

Research question 1: Who chooses teaching as a career and why?

(d) What motivates people in different countries to go into teaching?

(e) How do people in different countries view teaching as a profession?

(f) Are there differences in motivational factors and perceptions of teaching between gender?

Research question 2: Why do postgraduate teacher trainees in England choose teaching as a career?

(h) Who are the trainees?

(i) What are their motivations?

(j) Do their motivations to teach differ by age, gender, career choice and training routes?

(k) What are their perceptions of the teaching profession in England?

(l) Do their perceptions of teaching differ by age, gender, career choice and training routes?

(m) How far do trainees experience social dissuasion and are they satisfied with their decision to teach?

(n) Do levels of social dissuasion and career satisfaction differ by age, gender, career choice and choice of route?

Research question 3: What are the levels of professional commitment and career development aspirations of teacher trainees in England?

(d) How likely are they to stay in teaching?

(e) How satisfied are they with their career choice at the end of their training?

(f) What are their career development aspirations?

The findings for each research questions will be discussed as they are presented.

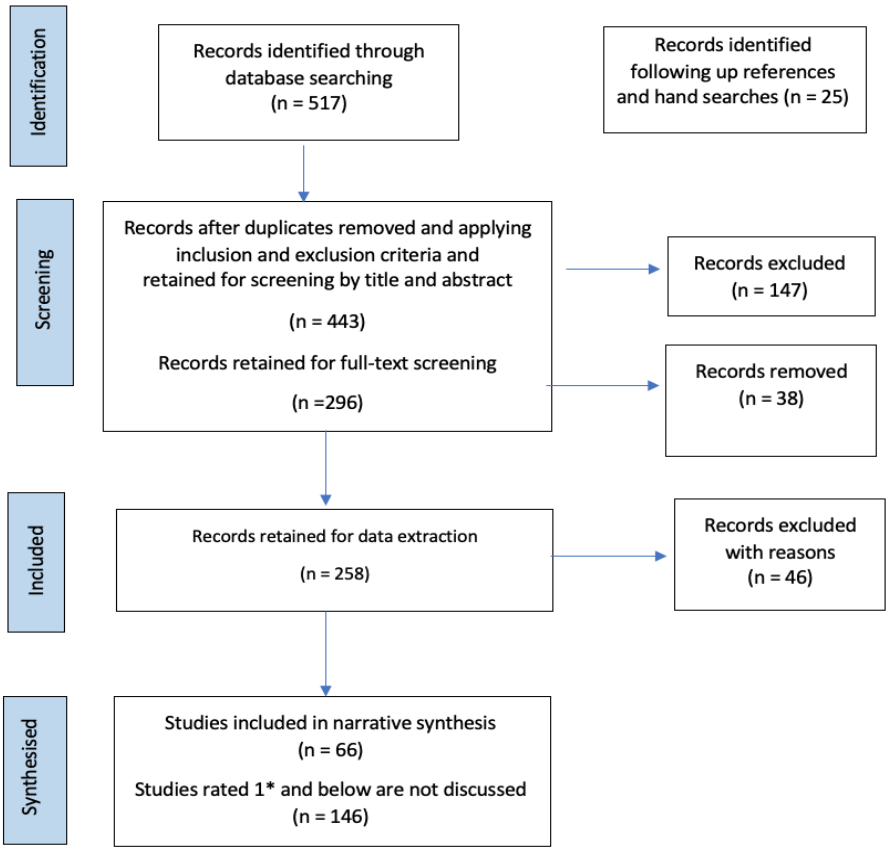
Chapter 7
SYSTEMATIC REVIEW FINDINGS

7.1 Introduction

This chapter presents the results of the systematic review. This work for my EdD has been published in a peer-reviewed journal (See et al., 2022).

The 212 studies included in the review cover key regions: East Asia and Southeast Asia, Africa, Middle East and Western democracies. The results are grouped into these four regions as existing literature suggests that teachers in different regions may be motivated to choose, or not, choose teaching for different reasons. South Asia is not included as there were no studies rated 2* above that looked at countries in this region, such as Pakistan and Bangladesh.

Figure 17: Prism flow Chart showing the number of records at each stage



The review focuses on the results from studies rated at least or above 2*. The lower evidence studies, while they do not inform the evidence, can provide context and additional information. Studies rated 1*or 0 are summarised in Appendix 1. These are mainly studies with a weaker design, such as small samples, no comparator or high attrition. Table 14 shows the number of studies in the review with each security rating.

Table 14: Security ratings of included studies

Security rating	Number of studies
4*	0
3*	11
2*	55
1*	123
0*	23
Total	212

7.2 What motivates people in different countries to go into teaching?

According to the results of the 2018 OECD TALIS, teachers in most countries rated desire to influence children as an important factor in their decision to enter the teaching profession. The majority of teachers in the survey also cited what is often described as altruistic reasons (e.g., desire to benefit disadvantaged, contribute to society).

There were some exceptions. For example, Finnish teachers were more likely to be motivated by teaching being a steady career (career progression) and a reliable income. Teachers in Shanghai and Taiwan, South Korea and Singapore were the most likely to consider teaching as a career that fits in with their personal and familial responsibilities. On the other hand, teachers in England were least likely to go into teaching for these reasons. They were most likely to report being motivated by the altruistic value of teaching.

The findings from the systematic review are as follows:

7.2.1 East Asia and Southeast Asia

There are seven studies rated 2* and above in this region (see Table 15). Only one involves secondary school students (Lai et al., 2005). The rest were of pre-service teachers.

Table 15: Summary of studies on teaching motivation in East and Southeast Asia

Security rating	Studies	Country	Sample
3*	Lai, Chan, Ko & So (2005)	Hong Kong	Secondary students
2*	Bakar, Mohamed, Suhid & Hamzah (2014)	Malaysia	Pre-service
	Htang (2019)	Myanmar	Pre-service
	Lee, Kang & Park (2019)	South Korea	Pre-service
	Lin, Shi, Wang, Zhang & Hui (2012)	China	Pre-service
	Ye, Wang, Zhang, Ding & Ye (2021)	China	Pre-service /In-service
	Yong (1995)	Brunei Darussaalm	Pre-service

Around 51% of 1,249 secondary students in Hong Kong indicated that they were interested in teaching and 49% indicated they were not (Lai et al., 2005). For those who were interested in a career in teaching, the most influential reason was related to subject interest: “wish to teach the subjects I like”, followed by a desire to make a social contribution (“teaching is meaningful” and a “wish to help others”). For those not interested in teaching, the main reasons were personality fit, the nature of the job (monotonous job, strenuous duties, too many responsibilities and working environment) and better prospects in other occupations.

Htang’s (2019) study of pre-service teachers in Myanar also rated subject interest as an important reason for their choice of teaching as a career followed by their interest in sharing their knowledge with children.

For pre-service teachers in East and Southeast Asia, the desire to make a social contribution was another important influencing factor in their choice of teaching as a career (Bakar et al., 2014; Lee et al., 2019; Lin et al., 2012; Ye et al., 2012).

A positive school experience is also an influencing factor for pre-service teachers in Asia (Ye et al., 2012; Lin et al., 2012). In Ye et al.'s (2012) study of Chinese pre-service and in-service teachers, "having good teachers" was the more highly rated reasons for wanting to be teachers, suggesting perhaps that teachers provided the role model. In another study of Chinese pre-service teachers, a positive school experience was ranked the third most influencing factor after social contribution (Lin et al., 2012). South Koreans, on the other hand, reported previous teaching and learning experiences as an important motivating factor (Lee et al., 2012).

East Asian teachers were less likely to indicate that teaching was a fallback career (Lee et al., 2019; Ye et al., 2021), but when compared to the US sample in the same study, American student teachers were less likely than Chinese students to agree that teaching was a second-choice career (Lin et al., 2012). For pre-service teachers in Brunei Darussaalm, however, teaching was clearly not a first-choice career. This could be specific to the context in Brunei Darussaalm, or it could be a result of the context of the time of the study – 1995. Either way, it is not representative of the findings of Asia when compared to the other studies. TALIS data also indicates teaching is not a fallback career as over 80% teachers in China, South Korea and Taiwan said that teaching was their first-choice career.

One study also explored the motivations of teachers in schools, in particular those at the beginning of their career (Ye et al., 2021). They found that teachers' belief in their own ability to teach was an important factor in them choosing teaching. This was followed by wanting to contribute to society. The highest rating of ability is in contrast to the findings of pre-service teachers. It is important to add though, that although the results table suggest that ability was the highest rated factor followed by social contribution, the commentary provided (as with their commentary for pre-service teachers) did also

demonstrate the influence of positive school experience. Like pre-service teachers, in-service teachers were also less likely to say that they entered teaching as fall-back career.

In summary, the evidence suggests that East Asian students were most likely to be motivated by interest in subject, followed by social contribution. The evidence suggests that for pre-service teachers, the desire to help others and to contribute to society, are also important motivating factors. Having a positive experience of school also influences some to choose teaching. For some in-service teachers, their perceived ability to teach may have attracted them to teaching. But this could be post-hoc rationalisation of career decision. Fallback career does not appear to be a motivating factor for pre-service or secondary students in choosing teaching.

7.2.2 Africa

Only four studies conducted in African countries rated 2* that met the inclusion criteria were included in this review (see Table 16).

Table 16: Summary of studies on teaching motivation in Africa

Security rating	Studies	Country	Sample
2*	Abotsi, Dsane, Babah and Kwarteng (2020)	Ghana	Pre-service
	Adkintomide &Oluwatosin (2011)	Nigeria	Students
	Kyriacou & Benmansour (2002)	Morocco	Undergraduates
	Moses, Admiraal, Berry and Saab (2019)	Tanzania	Pre-service

Abotsi et al. (2020) reported that “passion for teaching” was an important factor in influencing pre-service teachers’ in Ghana in choosing teaching as a career. It is not clear whether the items for this factor are related to subject interest, ability or the desire to work with children, but it is clear that the inherent nature of the job itself is important. Following

passion for teaching, job security was the second most influential factor for trainee teachers. The study also found that although students considered financial incentives important in their decision to teach, the removal of these incentives did not result in attrition, suggesting that financial incentives may be important, but they are not a deal breaker. See (2004) reported similar findings among pre-service teachers in England and Wales where trainees highlighted that financial incentives made it easier for them to train to teach, but did not affect their decisions.

Among Tanzanian pre-service teachers, it was their "commitment to student learning" that was a strong motivating factor for them wanting to go into teaching (Moses et al., 2019). They saw it as their responsibility to make teaching and learning interesting to their students. Self-efficacy, or their belief that they would be good at teaching, was the next highly rated factor. The school condition ("I think that schools have enough teaching facilities")was not an important factor.

In Nigeria, it was the characteristics of the teachers that mattered. The majority of the secondary school teachers surveyed had a negative attitude towards teaching as a career (Adkintomide & Oluwatosin, 2011), and most of them (84%) said it was their teachers' characteristics, in particular, the quality of teaching and teacher's spoken English that discouraged them from choosing teaching as a career. This suggests that teachers themselves are important advocates for their profession.

Innate interest in teaching was important to Moroccan undergraduates (Kyriacou & Benmansour, 2002). This includes desire to share knowledge with others and perceived innate ability/talent for teaching. Moroccan undergraduates were also motivated by the opportunity for personal development. This study was based on a survey of 203 Moroccan university students studying French or English. It is important to note however, that, unlike many countries, Morocco does not experience a shortage of teachers - recruitment into teacher education is competitive and the supply of teachers exceeds the demand. Perhaps this is because, in Morocco, teaching is perceived as a highly respected job, suggesting that the status of teachers is high.

In summary, pre-service teachers in Africa are attracted to teaching for a number of reasons and include those related to the inherent nature of the job itself (ability and passion for the job) as well as working with students. Having teachers as positive role models can be a powerful influence on students' choice of teaching as a career in Africa.

7.2.3 Middle East

Three studies that met the inclusion criteria and rated 2* are from Turkey (see Table 17). They all surveyed pre-service teachers' motivations but came to slightly different conclusions, reflecting the volatility of such survey findings. One study is from Israel and one from the UAE.

Table 17: Summary of studies on teaching motivation in the Middle East

Security rating	Studies	Country	Sample
2*	Dickson (2013)	United Arab Emirates	Secondary students
	Garra-Alloush, Chaleila and Watted (2021)	Israel	Pre-service
	Kılınç, Watt and Richardson (2012)	Turkey	Pre-service
	Öztürk-Akar (2020)	Turkey	Pre-service
	Yüce, Sahin, Koçer and Kana (2013)	Turkey	Pre-service

In Kılınç et al.'s (2012) study of 1,591 pre-service teachers in Turkey, the strongest motivating factor was found to be altruistic reasons: wanting to "make social contribution", "shape future of children and adolescents" and "enhance social equity". Pre-service teachers were least likely to report choosing teaching as a fallback career. They also did not choose teaching because of the ability to work elsewhere.

A smaller study of 238 pre-service teachers, also in Turkey (Yüce et al., 2013) found that pre-service teachers were most likely to be motivated by extrinsic reasons, such as the status of teaching, job flexibility, salary, social influence (support and pressure) and job security. One explanation for the conflicting finding with Kılınç et al.'s (2012) is probably

because there were considerably more question items on extrinsic motivation than the other factors. Analysing single items showed that the three most influential reasons for choosing teaching were that teaching was seen as an “idealized profession”, followed by “love for Turkish language and wanting to teach it to others” and “being in service of people”.

For pre-service teachers in Turkey on alternative certification routes, their desire to make a social contribution and make a difference to young people’s future appeared to be the strongest motivating factor (Öztürk-Akar, 2020). Their innate interest in teaching, and teaching being a family friendly profession are other reasons. But, there are some variations among students in different disciplines. Sports teachers scored intrinsic career motivation more highly. Teachers in Health study rated time for family as important. For maths students, teaching was a fallback choice. Older students rated intrinsic career value, job transferability and working with children more highly.

Among Israeli female pre-service teachers, job security, belief in their own ability to teach and the family friendly nature of the profession were key in their choice of teaching as a career (Gara-Alloush et al., 2021). However, when the question items were analysed separately, interest in teaching their subject (English) was the most highly rated item. They were least likely to say that they went into teaching because they had no other choice, or for job transferability (working elsewhere).

Emirati and non-Emirati secondary students in the UAE were least likely to say they want to be teachers (Dickson, 2013). Only 17% of Emirati citizens and 22% of non-Emirati citizens had given serious consideration to teaching as a possible career path. A key deterrent appeared to be the difficult, tiring nature of the job, or what can be called “task demand” of the job. Students outlined some key expectations of their careers. These were salary, opportunities for progression and providing financially for one’s family.

In summary, the studies of pre-service teachers suggest that altruistic motivations, such as social contribution is an important factor in Turkey, whereas in Israel, job security is a

central motivator. The differences in influential factors between Turkey and Israel might be explained by cultural differences, however they may also be explained by gender differences (e.g., Gara-Alloush et al.'s 2021 study surveyed only women). It is therefore not possible to make any reasonable conclusions about influence of culture on individual's motivations as the study subjects across these studies are different.

Subject interest, however, does appear to be highly influential in both Israel and Turkey for pre-service teachers. Secondary students in the UAE were not particularly interested in teaching (Dickson, 2013). What they looked for in a career were job security, salary, career progression and the ability to provide for their family, perhaps suggesting that they did not see teaching as providing these.

7.2.4 Western democracies

There are 48 studies rated 2* and above conducted in the West. Given this, this section will look at motivations based on the different sample groups investigated: secondary students, undergraduates, pre-service teachers and in-service teachers. Some studies included more than one group. Therefore, some studies will be repeated in the different sections, as and when appropriate. A disproportionately large number of studies were conducted in the US (18/48 of those rated 2* and above). Of these, five were rated 3*.

Secondary students

Ten of the studies included in this review are based on the views of secondary school students. 70% of these studies were conducted in the US (Table 18).

Table 18: Summary of studies on teaching motivation in the West (secondary students)

Rating	Studies	Country
3*	Mangieri and Kemper (1984)	US
2*	Christensen, Davies, Harris, Hanks & Bowles (2019)	US
	Christensen (2021)	US
	Hunter (1998)	US
	James & Chopin (1997)	England and Wales
	Johnston, McKeown & McEwen (1999a)	Northern Ireland
	Judge (2004)	US
	Keck Frei, Berweger & Bieri Buschor (2017)	Switzerland
	Schaffner & Jepsen (1999)	US
	Wong (1994)	US

Teaching does not appear to be a popular choice of career for secondary students in the West. Some studies indicate that approximately one third or less of secondary students appear to seriously consider entering teacher training (Johnston, McKeown & McEwen, 1999a; James & Chopin, 1997; Christensen, 2021); however, there are also studies which suggest that this might be even lower (e.g., Hunter, 1998 (19.7%) and Judge, 2004 (13.3%)). One study reported a finding as low as 2% but the sample for this were all male academic high school students, which research indicates are less likely to consider teaching (gender differences will be further explored in later sections).

The strongest study, rated 3*, was a large study involving over 4,000 (response rate 87%) high school students across six states (Mangieri & Kemper, 1984). The results showed that factors relating to student's innate interest in their subject and perceived knowledge and skill were influential. "Desire to work with children/young people" was also an important factor. While prestige (or status), recognition and working conditions were not important to those who were interested in teaching, they were considered very important to those not interested in teaching. There is also a gender difference with males (56%) more likely to consider working conditions as particularly important than females (28%).

Therefore, policies to attract more men into teaching should emphasise those factors that are considered especially important to them.

The 2* studies also reported similar results. Interest in the subject, perceived ability in teaching, job satisfaction and a desire to work with children were key motivating factors. Christensen et al. (2019) found that self-efficacy (belief in one's ability) was the most important factor students considered when deciding about teaching as a career. Keck Frei et al.'s (2017) study in Switzerland similarly found that males reported that their perceived ability was an important factor in their decision. As well as the importance of self-efficacy, Christensen et al.'s (2019) study found that encouragement from family and friends, gender and academic success also predict choosing to teach. Those who intended to teach were more likely to be females and perceived themselves as average students.

Schaffner & Jepsen's research (1999) tested the relationship between 243 high school students' perceived ability to teach and their likelihood of choosing teaching. The results of the path analysis showed a link between self-efficacy and interest in teaching, and interests in teaching in turn influences career choice. Interestingly, strong belief in teaching values (e.g., contribution to society and making a difference to children's lives) are negatively correlated with students' intention to be a teacher. This contradicts the findings of most cross-sectional studies. It is possible that the programme raised student's perception of the value of teaching but did not alter their commitment to the profession. The findings demonstrate that recruitment policies that emphasise the social or utility value of teaching may not work in changing students' behaviour.

Wong's (1994) study of 646 grade 7 and 8 students revealed that school experience is an important factor, particularly for male students. Those with negative perceptions of the school/classroom environment were less inclined to express interest in teaching compared to those who felt a belonging to the school.

Male students in Switzerland also reported that their perceived ability was an important factor in their decision (Keck Frei et al., 2017). Interest in working with children/young people, the importance of having free time for other things and having relevant prior experience working with children are factors that influence male students' decision to teach. Other international studies (Brookhart & Freemann, 1992; Fokkens-Bruinsma & Canrinus, 2012a; Hoy, 2008; Thomson et al., 2012) also reported similar results. Having teachers among family members had no influence on students' decision to train as a teacher although having male role models, such as teachers and fathers, played an important role in supporting their career decision.

An important finding is that the majority of male student teachers made their decision while in school. Similar findings were found among German students (Faulstich-Wieland et al., 2010; Savage et al., 2021) and undergraduates in England (Gorard et al., 2021). Given that studies also show that the number of secondary school students want to teach is low, particularly for males, this is concerning. Opportunity for professional advancement was not considered an important factor for those who decided to train. But for those who did not want to be teachers, professional advancement, status and financial security are important in their choice of career.

Johnston et al.'s (1999) study of 1036 sixth-form students in Northern Ireland also identified altruistic and intrinsic motivation (e.g., wanting to work with children, to make a social contribution and impart knowledge) as motivations for wanting to teach. Extrinsic factors, such as job security, salary, status and promotion prospects, were deemed less important. There are some differences between gender, with females being more likely to place greater importance on working with children, whereas male students were more likely to emphasise the importance of salary. Because there was no comparison made between those who chose to teach and those who did not, it was not possible to say what motivates students to go into teaching and what deters them.

James and Choppin (1977) compared the motivation and perceptions of 1,859 sixth-form school students in England and Wales. The 30% who indicated some level of interest in

teaching reported that it was their desire to contribute to society that was important. They were less concerned about salary and status. They saw teaching as a secure career with attractive working hours while also providing them the opportunity to influence the future generation.

In summary, it would appear from the included studies in this review that teaching is a career option that secondary students may be willing to consider; however, it is not a career choice that a large proportion of students have identified as their first choice. The review suggests that there are a number of key factors which influence secondary students' choice of career: desire to work with children, perceptions of job satisfaction, desire to make a social contribution and positive experience of school, students perceived innate ability and interest in subject. However, it would appear that salaries and professional advancement are important in attracting those who are not yet interested in teaching. Highlighting the social utility value of teaching may work in persuading those already interested in teaching to be teachers but may be less effective in altering the career choice of those who are still unsure about teaching.

Undergraduates

Ten studies looked at undergraduates' motivation to teach. Six of these were rated 3* (see Table 19) which is the strongest rating for studies in this review.

Table 19: Summary of studies on teaching motivation in the West (undergraduates)

Rating	Studies	Country
3*	Elfers, Plecki, St. Jon &Wedel (2008)	US
	Giersch (2016)	US
	Gorard, Ventistia, Morris & See (2021)	England
	Kyriacou, Coulthard, Hultgren & Stephens (2002a)	Norway
	See (2004)	England and Wales
	Allen (2000)	US
2*	Giersch (2021)	US
	Klassen, Granger & Bardach (2022)	UK
	Tusin & Pascarella (1985)	US

	Tusin (1991)	US

The strongest studies (3*) suggest that around half of undergraduates may be open to choosing teaching. In England, over 59% of the students said that they had considered teaching as a career (Gorard et al., 2021) and 20% had serious intention to become a teacher. Similarly, See's (2004) study of undergraduates and teacher trainees in Wales and South-west England found that 64% of respondents had thought of being a teacher. Of these, 30% indicated they had firm intentions to be teachers. One study in the US found that only 40% of STEM subject undergraduates were willing to consider a career in teaching, with only 6% seriously considering it (Elfers et al., 2008), but this focused on students on maths, science, computer science and engineering degrees, which are notoriously hard to recruit subjects in teaching.

In order to understand general career drivers, some studies explored what undergraduates look for in a career. Job satisfaction and enjoyment appears to be particularly important (Kyriacou et al., 2002; Gorard et al., 2021). Other factors such as pay, job security, promotion prospects, opportunities to develop new skills and interest in their subject of study are also key (Gorard et al., 2021). A Norwegian study (Kyriacou et al., 2002) did find that a good starting salary was not influential, nor was high earnings over the length of the career. This may, however, be specific to Norway due to culture and values where a focus on choosing a career primarily because it is highly paid, or would accord high status and prestige, would be played down. Nevertheless, intrinsic and extrinsic factors seem to be general career drivers for undergraduates in the West.

The prominence of extrinsic motivators is an interesting finding, as those who want to teach often do not rate such motivators highly. For instance, Gorard et al. (2021), when comparing those who have considered, intend to be teachers and those who have not considered teaching, found that potential teachers are more likely to report being motivated by having a chance to share knowledge and give something back to society. Other studies also found that sharing knowledge and interest in subject was emphasised by those who indicated they were considering teaching (See, 2004; Kyriacou et al., 2002).

Other motivators included working with children, intellectual challenge and long holidays (Kyriacou et al., 2002; See, 2004; Gorard et al., 2021).

When the motivations of those who do not want to teach are considered, the results reveal a clear difference in motivations, particularly the role of extrinsic factors in decisions to teach or not. Kyriacou et al.'s (2002) analysis demonstrated that the anti-teaching group placed more emphasis on factors related to salary and promotion prospect. This concurs with the findings of See (2004) who found that non-teachers were more likely to value factors like salary, promotion opportunities, job status, good working conditions and intellectual stimulation. This suggests that extrinsic factors may be deterrents for those not wanting to teach. Perhaps this is why such factors are under-emphasised in research which looks only at the motivations of those already teaching or training to teach.

A few studies explored whether interest in teaching could be increased through certain interventions. Giersch (2016) conducted an experiment with 238 undergraduates in a North Carolina university who did not plan to enter teaching. Participants were randomly divided into three groups. One group presented with a list that emphasised "social utility values" of teaching (or altruistic motivation), and another group were given a list of "personal utility values" of teaching (or intrinsic motivation), while the third group formed the control. The results demonstrated that students receiving the "personal utility" treatment were more likely to find teaching appealing (66%) or very appealing (21%) than those exposed to the social utility treatment (58%). The control group (those not assigned to any treatment) were least likely to find teaching appealing (46%). This suggests that exposure to personal and social utility values of teaching may increase undergraduates' interest in the profession.

Giersch (2021) also conducted another similar study which tested 10 motivating factors on 597 non-education major students in one university in North Carolina. The participants were not studying or planning to teach. Students were randomly assigned to three treatment groups (one group exposed to intrinsic rewards, one to extrinsic rewards and the third group to altruistic rewards) and one control group with no treatment. The study

showed that all three types of treatments (intrinsic, extrinsic and altruistic) resulted in the odds of selecting a greater expression of interest in teaching. The likelihood of choosing teaching as a career for the control group did not increase. This suggests that all these factors (intrinsic, extrinsic and altruistic) were influential, but intrinsic rewards were more important to non-educators, followed by altruism (social utility) and then extrinsic rewards (personality utility). There was a small gender difference, with men being more attracted to teaching for extrinsic reasons.

Self-efficacy (perception of one's skills in teaching) may also be influential on choice of career. Klassen et al.'s (2022) psychological experiment presented participants with a realistic portrayal of the job/teaching to see how they respond to real life classroom scenarios. Their responses were then matched with the attributes required for a teaching career as determined by experienced teachers. The results showed that how participants respond to the scenarios predicted whether they were more likely to explore a teaching career. Why this is the case may relate back to the fact that undergraduates see job satisfaction and enjoyment as important. How far a job is perceived to fit with one's abilities may influence whether they see teaching as a job that would offer career satisfaction.

A number of studies also considered individuals' demographic background and their choice of teaching. Teaching appears to attract those from less educated families with less prestigious occupational backgrounds, who have somewhat lower attainment prior to university. Prospective teachers also appear to expect lower degree results or have previous lower educational attainment and come from more generic subject areas (Allen, 2000; Gorard et al., 2021; Tusin & Pascarella, 1985; Tusin, 1991). The analysis shows that the factor that most strongly predicts those who are likely to consider teaching or not are those things related to student's university career, such as their subject choice, year of study and entry qualification. Those who chose generic subjects related to sports, languages and English are most likely to consider becoming a teacher, while those in more clearly occupationally related areas such as medicine, law and architecture are least likely. The kind of courses that students take at university is closely related to their career

intention, suggesting that many have already made a decision prior to entry to university as indicated in other studies (e.g., Cornali, 2019; Faulstich-Wieland et al., 2010; Keck Frei et al., 2017).

In summary, it would appear that teaching is a career option that undergraduates in the West may be willing to consider. Undergraduates were more likely to consider teaching if they perceived teaching as enjoyable with a positive work environment and offering job satisfaction. The evidence from the stronger studies indicates that the major deterrent to teaching might be the perceived negative working environment. Extrinsic factors were particularly important to men and those in STEM subjects. Therefore, policies to attract these under-represented groups might do well to emphasise the extrinsic value of teaching (e.g., pay, job status and job satisfaction). On the other hand, experiments also suggest that for those who might consider teaching, but have not, prioritizing how far teaching can offer intrinsic motivations might make teaching appealing to them. Although student background characteristics are important predictors of who are likely to choose teaching, they are not easy to change in the short term, and so these differences do not help much in deciding how to attract more people into teaching. However, research does indicate that most undergraduates have made a career decision by the time they are in university. Therefore, to increase the number of teachers in some subjects, like maths and science, might require an approach that targets students before they make their subject choice at university.

Pre-service teachers

All studies of pre-service teachers included in this review were rated 2* (Table 20). None were rated above this due to limitations in design or analysis. A large majority of the studies of teachers' motivation utilized the FIT-Choice Scale, which broadly classifies these motivating factors into three categories: intrinsic (personal utility), altruistic (social utility) and extrinsic. It is, therefore, not surprising that these studies report all the factors as important, differing only in the order of importance. This reflects the limitations of the FIT-Choice instrument. Few studies included other potential exogenous factors, such as

background characteristics, or used regression analysis to determine key influencing factors.

Table 20: Summary of studies on teaching motivation in the West (pre-service)

Rating	Studies	Country
2*	Bergey & Ranellucci (2021)	US
	Cornali (2019)	Italy
	Fokkens-Bruinsma & Canrinus (2012)	The Netherlands
	Giersch (2021)	US
	Glutsch & König (2019)	Germany
	Gratacós, López-Gómez, Nocito & Sastre (2017)	Spain
	Harms & Knobloch (2005)	US
	Heinz (2015)	International
	Heinz, Keane & Foley (2017)	Republic of Ireland
	Hogan, Reid & Furbish (2017)	New Zealand
	Ivanec (2020)	Croatia
	Johnston, McKeown & McEwen (1999b)	Northern Ireland
	Lin, Shi, Wang, Zhan and Hui (2012)	US
	Lohbeck & Frenzel (2021)	Germany
	Moran, Kilpatrick, Abbott, Dallat & McClune (2001)	Northern Ireland
	Nano, Kallçiu & Mita (2019)	Albania
	Ponnock, Torsney & Lombardi (2018)	US
	Wagner & Immanuel-Noy (2014)	Australia
	Watt & Richardson (2007)	Australia
	Watt & Richardson (2008)	Australia
	Watt et al. (2012)	Australia/US/ Germany/Norway
	Weiss, Syring, Keller-Schneider, Hellsten & Kiel (2018)	Germany/ Sweden/ Switzerland/Romania
	Whannel & Allen (2014)	Australia
	Williams & Forgasz (2009)	Australia
	Wolf, Auerswald, Seinsche, Saul & Klocke (2021)	Germany
	Yu (2011)	

	Zounhia, Chatoupis, Amoutzas & Hatziharistos (2006)	Greece

Interest in subject

Interest in subject was identified as an important motivational factor in a number of studies (Glutsch & König, 2019; Heinz et al., 2017; Moreau, 2015; Zounia et al., 2006). When it was not the most important, it was still recognised as key driver in decision making (Nano et al., 2019; Ponnock et al., 2018).

Glutsch & König's (2019) study surveyed 386 first-year teacher trainees in one university in Germany who studied different subject combinations. In addition to demonstrating the influence of subject interest, latent path analyses revealed that students who value their studied subjects' importance highly also show higher intrinsic, social-altruistic, and pedagogical motivations.

Heinz's (2013) survey of 344 successful applications to secondary teacher training in Ireland revealed the importance of intrinsic factors (e.g., interest in subject, enjoyment of teaching, desire to share knowledge, followed by perceived ability and previous teaching experience). Other altruistic reasons, such as contributing to society, wanting to shape the future and desire to work with children were also reported as important. Participants were particularly concerned about the stress, status, long hours, pay, relationships with parents, relationships with colleagues and discipline. As with other studies, no comparison was made to other professions so how far such concerns are specific to teaching cannot be determined.

The influence of subject interest may also differ depending on subject. Some studies suggest that love of subject may be more likely for specialist subjects. Physical education teachers in Greece, for example, were more likely more likely to rate love of subject for wanting to teach (Zounhia et al., 2006). There also may be differences based on national contexts. Moreau (2015) similarly demonstrated that French teachers were more likely to rate subject interest. Subject expertise was viewed as core to professional identities.

Innate interest in teaching and other intrinsic factors

As well as subject interest, other intrinsic factors also appear to be important for choosing teaching. Love for teaching itself and perceived teaching abilities were identified in a number of studies in this review (Heinz et al., 2017; Ponnock et al., 2018; Gratacós et al., 2017; Ivanec, 2020; Watt et al., 2012; Wagner & Immanuel-Noy, 2014; Nano et al., 2019).

Intrinsic career value was a key motivation in Heinz et al.'s study (2017) which surveyed cohorts in 2006 and 2013. In both cases, it was highly reported. Other studies report similar results (Lin et al., 2012; Watt et al., 2012 (German sample); Watt & Richardson, 2007). Watt and Richardson's (2008) study found that pre-service teachers who want to stay in teaching for their whole career frequently nominated 'passion for teaching' as a reason for choice of teaching. This suggests that it may be particularly influential for those who are committed to teaching for the long-term.

Given that career satisfaction and enjoyment in one's job are key generic career drivers (e.g., Gorard et al., 2021), it is unsurprising that perceived ability is also identified in the literature by pre-service teachers (Watt and Richardson, 2007; Lin et al., 2012; Fokkens-Bruinsma & Canrinus, 2012; Heinz et al., 2017; Gratacós et al., 2017; Ponnock et al., 2018; Ivanec, 2020). Williams & Forgasz's (2009) research revealed that 81.8% of participants chose 'necessary attributes' as a reason for choosing teaching, followed by believing that teaching would give them high job satisfaction (81.6%).

Work with children is another reason cited highly in literature on choosing to teach. But, whether this is reported as an intrinsic or altruistic motivation differs. However it is classified, wanting to work with children is influential (Johnston et al., 1999b; Weiss et al., 2018; Nano et al., 2019; Williams & Forgasz, 2009; Watt & Richardson, 2007; Wagner & Immanuel-Noy, 2014; Watt et al., 2012; Zounhia et al., 2006).

Altruistic motivations

Wanting to make a difference is often prevalent in research looking at pre-service teachers' motivations (e.g. Moran et al., 2001; Watt & Richardson, 2007; Yu, 2011; Lin et

al., 2012; Watt et al., 2012; Gratacós et al. 2017; Glutsch & König, 2019; Bergey & Ranellucci, 2021).This encompasses notions of wanting to make a positive difference to the lives of children by shaping their future or to society more generally.

Heinz et al.'s (2017) study which compared findings from two cohorts (2006 and 2013) found that shaping the future of children changed in importance. Whereas this was ranked 4th in 2013 (third if the "teaching subject" factor is removed as this did not feature in 2006), it was ranked 5th in 2006. This may indicate that the importance of this factor as a motivator increased over time. Whether this is linked to the economic recession for the 2013 cohort needs to be considered in light of the findings.

Extrinsic motivators

Extrinsic factors appear to be more influential for some groups. Harms and Knobloch (2005) found that those who chose to teach in formal education were more likely to indicate intrinsic motivation, whereas those who chose to teach in non-formal education were more strongly motivated by extrinsic factors. A limitation is that motivations defined as altruistic motivations, such as social contribution, were not included.

Cornali's (2019) study of pre-service teachers in Italy reported higher ratings for extrinsic motivations, such as job security and good working hours with long holidays. They also found that decommitted motives were more influential (e.g., "more job opportunities"; "easier training programme"; "subjects taught are easier") than committed motives (such as "greater relational gratification in working with children"; "person belief in the importance of the first years of education"; "more stimulating teaching"). It is worth recognising that all the participants in this study were females, with most from middle-class families with high parental educational and professional backgrounds.

The notion of teaching being a fallback career was not substantiated by the research. It was rated low in a number of studies (Gratacós, et al., 2017; Ivanec, 2020; Lin et al., 2012; Watt & Richardson, 2007; Ponnock et al., 2018; Watt et al., 2012; Weiss et al.,

2018; Yu, 2011; Heinz et al., 2017). Social influence was also not reported as influential (Lin et al., 2012; Moran et al., 2001; Watt & Richardson, 2007; Wagner & Immanuel-Noy, 2014; Weiss, 2018; Glutsch & König, 2019; Heinz et al., 2017).

In summary, there are a number of factors deemed important by pre-service teachers. In particular, interest in subject, innate interest in teaching , social contribution and working with children are noted. Pre-service teachers are not motivated by the fallback career factor or by social influence.

In-service

One study in this review of in-service teachers was rated a 3*. The other six were rating 2* (Table 21).

Table 21: Summary of studies on teaching motivation in the West (in-service)

Rating	Studies	Country
3*	Han and Rossmiller (2004)	US
2*	Argentin (2013)	Italy
	Howes and Goodman-Delahunty (2015)	Australia
	Moreau (2015)	England/France
	Ponnock, Torsney & Lombardi (2018)	US
	Sclan (1993)	US
	Wood (2001)	US

It is unsurprising that the results of studies which look at motivations of in-service teachers are similar to pre-service teachers. Intrinsic motivations, including interest in subject and innate interest in teaching are noted in the literature (Han & Rossmiller, 2004; Howes & Goodman-Delahunty, 2015; Argentin, 2013; Moreau, 2015; Ponnock et al., 2018).

Han & Rossmiller's (2004) study utilised the National Longitudinal Study of the High School Class of 1972 which followed students from high school to see who went into teaching and who stayed on in teaching. Those interested in teaching and those already teachers were more likely to be motivated by intrinsic motivations, and less likely by salary.

Although there is research to suggest that males may be more likely to be motivated by extrinsic factors (Han & Rossmiller, 2004), altruistic motivations are important for in-service teachers. Further, Wood's (2001) study of male African-Americans found that the necessity to provide role models and the need to diversify the workforce emerged as influential. This demonstrates the importance of the usefulness and purposefulness of teaching for the next generation.

Similar to the findings of pre-service teachers, in-service teachers did not report choosing teaching as a "fallback" option (Ponnock et al., 2018). Indeed, Argentin (2013) found that teaching was viewed as aspirational. This suggests that those who teach not only chose teaching as a first-choice career but saw it as an ambitious career choice.

To summarise, intrinsic and altruistic factors motivated in-service teachers, as they do with pre-service teachers.

7.2.5 Summary

Motivations to teach are generally universal. There are some slight differences in rank order based on which group are surveyed (secondary school students, undergraduates, pre-service teachers and in-service teachers) but they encompass intrinsic, altruistic and extrinsic motivations.

People who are interested in teaching, or already teaching, often cite love of their subject, and inherent interest or ability to teach as a motivating factor. Wanting/enjoying working with students and wanting to make a difference are also common themes which appear in many of the studies in this systematic review. They appear less concerned with factors such as job security and have not chosen teaching as a fallback career.

The results of those who are interested in teaching or who have chosen teaching are not unsurprising given that the majority of the research included those who have already chosen teaching as a career.

7.3 How do people in different countries view teaching as a profession?

This section will present the findings of studies which have investigated perceptions of teaching. At the beginning of each sub-section which looks at perceptions in different regions, the studies included will be identified.

The literature often groups perceptions into two main themes: task demand (the expertise required and the high demands of the job) and task return (the social status of teaching and salary).

Social dissuasion (how far individuals experience dissuasion to teach from others) and career satisfaction will also be presented in this section as they relate to perceptions of the teaching profession from a societal influence point of view, as well as personal reflection of career satisfaction of those who have decided to teach.

7.3.1 East Asia and Southeast Asia

Only four studies in East Asia and Southeast Asia explored perceptions of the profession (Table 22).

Table 22: Summary of studies on perceptions of teaching in East and Southeast Asia

Rating	Studies	Country	Sample
3*	Lai, Chan, Ko & So (2005)	Hong Kong	Secondary students
2*	Lee, Kang & Park (2019)	South Korea	Pre-service
	Lin, Shi, Wang, Zhang & Hui (2012)	China	Pre-service
	Ye, Wang, Zhang, Ding & Ye (2021)	China	Pre-service / In-service

As discussed earlier, Lai et al.'s (2005) study of 1,249 secondary school students indicated that 51% were interested in teaching and 49% were not. Although this indicates that half of students are not interested in teaching, it did rank highly as a respected career and also a career students wanted to join. This suggests that teaching may be viewed as a good career option amongst secondary students in Hong Kong.

The other studies included in this review of perceptions focused on pre-service and in-service teachers, so those who have already chosen teaching as a career.

There is a slightly mixed picture in terms of teaching being viewed as a demanding job requiring expertise and hard work. Pre-service and in-service teachers in two studies in South Korea and China believed it was (Lee et al., 2019; Ye et al., 2021). However, in contrast, Lin et al. (2012) found that the demands of teaching were rated below the midpoint, suggesting that it is not particularly viewed as a demanding career. Lin et al. (2012) suggest that this may be because in China, teachers work in a centralised context where the curriculum delineates what to teach and how to teach, with more non-teaching time with colleagues (Lin et al., 2012). The difference between the two results may therefore be due to a changing context in teaching over time.

Across all studies, teaching was generally seen as a career which is respected and paid well (Lee et al., 2019; Ye et al., 2021). Pre-service teachers tend to perceive teaching more positively than beginning teachers (Ye et al.'s, 2021). As with teaching as a demanding career, Lin et al.'s (2012) research found that both salary and status were again below the mid-point. It would appear that the sample, on the whole, did not share particularly strong views of teaching.

Pre-service and in-service teachers were found to experience moderate levels of dissuasion from others (Lin et al., 2012; Ye et al., 2021) and were relatively satisfied with their choice of career. Interestingly, Ye et al. (2021) found that beginning teachers were less satisfied with their choice than pre-service teachers. This may indicate a difference between perceptions of the profession and the realities of the job.

In summary, teachers in East and Southeast Asia see teaching as a demanding profession with good renumeration (pay and respect). The data suggests that teachers are moderately satisfied with their choice and social dissuasion is also moderate. There is some difference in results from the two Chinese studies, but this may be indicative of the context at the time.

7.3.2 Africa

Three studies included in this review referenced perceptions (Table 23).

Table 23: Summary of studies on perceptions of teaching in Africa

Rating	Studies	Country	Sample
2*	Adkintomide & Oluwatosin (2011)	Nigeria	Students
	Kyriacou & Benmansour (2002)	Morocco	Undergraduates
	Moses, Admiraal, Berry and Saab (2019)	Tanzania	Pre-service

The study of Nigerian students showed that the majority surveyed (74%) had a negative perception of teaching (Adkintomide & Oluwatosin, 2011). Students' attitude towards teaching is very much influenced by how they perceive their teachers. This suggests that teachers are important role models and ambassadors for their profession.

For undergraduates in Morocco, secondary school teaching is a strong career option (Kyriacou & Benmansour, 2002), with 73% of undergraduates considering it. The most important generic driver for undergraduates is a well-respected career, and 71% believed that teaching definitely offered it, with a further 26% thinking it might. Perceptions of salary however do not appear to be as positive with low responses. Undergraduates were also not certain that teaching would offer a good working environment. This may suggest that what draws Moroccan students to teach is the high level of respect it commands.

Perceptions of teaching may impact retention. For instance, Moses et al. (2019) found that the more positive attitudes towards the profession and programme satisfaction, the more student-teachers indicated commitment to the profession. They also found that perceived school conditions were not a significant predictor of their intentions to enter the teaching.

In summary, it would appear that perceptions of teaching in Africa may be context dependent. In Nigeria it is not viewed as a strong career option, but it is in Morocco. Teaching is viewed by prospective entrants in Morocco as well respected, but not necessarily offering a good salary or a good working environment. This does not however,

seem to put off people from teaching. In Tanzania, for those who have already chosen to teach, the more positively they view the profession the more likely they are to commit to teaching and student learning. This is not an unsurprising result.

7.3.3 Middle East

Three of the studies included in the review looked at perceptions in the Middle East. All were rated a 2* (Table 24).

Table 24: Summary of studies on perceptions of teaching in the Middle East

Rating	Studies	Country	Sample
2*	Dickson (2013)	United Arab Emirates (UAE)	Secondary students
	Kılınç, Watt and Richardson (2012)	Turkey	Pre-service
	Öztürk-Akar (2020)	Turkey	Pre-service

Dickson's (2013) study of Emirati and non-Emirati male secondary students revealed that teaching is generally perceived as poorly paid and around half believed that teachers had a low status. Teaching is also perceived as a profession more suitable for women and with limited promotional opportunities. Overall, teaching was not seen to offer what the students looked for in their choice of career, such as a high salary.

Turkish pre-service teachers perceived teaching as a job requiring expertise with moderate levels of pay (Kılınç et al., 2012; Öztürk-Akar, 2020). Teaching was seen a demanding job, although this was slightly lower in Öztürk-Akar's (2020) study. Pre-service teachers report that they are generally satisfied with their decision to teach and experienced low levels of social dissuasion.

Perceptions are potentially different for some groups. Kılınç et al. (2012) compared science-related students with non-science related students, finding that the former did not see teaching as such a demanding profession and had had lower perceptions of status and pay. They were also less satisfied with career choice and more likely to choose teaching as a fallback. This may link to the findings in Western democracies where those

teaching in more formal education are less concerned with extrinsic motivation and therefore perceptions of teaching are less important in their choice of career.

The studies suggest that teaching is not viewed as a well-paid career, but it is seen as a demanding job. Pre-service teachers are generally satisfied with their decision to teach.

7.3.4 Western democracies

Given the number of studies in Western countries rated 2* and above, this section will look at perceptions of secondary students and undergraduates first, followed by pre-service teachers. Studies which relate to perceptions of in-service teachers are very limited.

Secondary students

Four studies explored perceptions of secondary students in the West. One was rated 3* and the others rated 2* (Table 25).

Table 25: Summary of studies on perceptions of teaching in the West (secondary students)

Rating	Studies	Country
3*	Mangieri (1984)	US
2*	Christensen, Davies, Harris, Hanks & Bowles (2019)	US
	Christensen (2020)	US
	Johnston, McKeown & McEwen (1999b)	Northern Ireland

The strongest study, rated 3*, was a large study involving over 4,000 (response rate 87%) high school students across six states (Mangieri, 1984). This found that interest in teaching is low, with only 9% very interested and 26% somewhat interested. Teaching is therefore not viewed as a strong career choice. For the group that were not interested in choosing to teach, teaching is not viewed as a career with strong pay. Johnston et al.'s (1999b) study equally found that secondary students do not rank teaching highly for salary. Christensen's (2020) study reported contrasting results, with secondary students believing teachers were well paid for their role.

Secondary school students do not think teaching is a career with high levels of respect or status (Christensen, 2020; Johnston et al., 1999b). Work conditions were not viewed as particularly favourable either, with only a third agreeing that work conditions were good and expectations were reasonable. This could indicate that students believe that teaching is a demanding job. Despite this more negative view of teaching, Johnston et al. (1999b) found that students saw teaching as high for potential job satisfaction.

Undergraduates

Out of the 5 studies which explored undergraduates' perceptions of teaching, four were rated 3* (Table 26).

Teaching is not seen as a career which correlates with students' generic career drivers. For example, job security was seen as very important to undergraduates (77%) yet only 43% thought teaching definitely offered this (Elfers et al., 2008). Further, an enjoyable job was highly rated (98%) yet only 9% were certain teaching would offer this and 67% thought it might (Kyriacou et al., 2002). These findings indicate that teaching is unlikely to be seen as a strong career choice for the majority.

Table 26: Summary of studies on perceptions of teaching in the West (undergraduates)

Rating	Studies	Country
3*	Elfers, Plecki, St. Jon &Wedel (2008)	US
	Gorard, Ventistia, Morris & See (2021)	England
	Kyriacou, Coulthard, Hultgren & Stephens (2002a)	Norway
	See (2004)	England and Wales
2*	Giersch (2021)	US

See's (2004) research compared findings of those who were interested and not interested in teaching. Those who believed teaching could offer them the values they looked for in a job were more likely to be confirmed teachers. Confirmed teachers tended to have a more positive perception of teaching and see it as a profession offering job security, good career prospects and promotion opportunities. They were also more likely to agree that teaching offers the intellectual stimulation they looked for in a job.

On the whole, undergraduates are unsure how far teaching is an intellectually demanding job. Both Eflers et al. (2008) Kyriacou et al. (2002) found that a similar proportion of students thought teaching would definitely offer intellectual stimulation - around one third. As intellectual stimulation is important to undergraduates in the West (Gorard et al., 2021; See, 2004), as discussed earlier , focusing on this aspect of the role might be fruitful for recruitment.

Renumeration is not viewed positively by undergraduates. They think of teaching as a low paying profession both in the short-term and over the length of a career (Kyricaou et al., 2002; Elfers et al., 2008). This is the same for aspiring teachers and those not interested (Giersch, 2021). Although perceptions of status were higher than salary, there was still mixed views on this (Elfers et al., 2008; Kyriacou et al., 2002). For example, in Norway, only 34% definitely agreed it was.

Finally, Gorard et al. (2021) found that, despite some of the literature and media suggesting otherwise, respondents generally did not agree that teaching is a career for those unable to do anything else, or one especially suited for women.

In summary, undergraduates viewed teaching as a job that does not necessarily meet important values they hold for their career. Teaching not viewed as a profession with particularly high levels of intellectual challenge, good pay or well respected.

Pre-service teachers

Table 27 provides an overview of the studies included in the review which focused on pre-service teachers' perceptions of the profession in the West.

Teaching is seen as a demanding job, requiring hard work and expertise (Watt & Richardson, 2007; Watt & Richardson, 2008; Yu, 2011; Watt et al., 2012; Fokkens-Bruinsma & Canrinus, 2012; Lin et al., 2012; Gratacós et al., 2017; Ivanec, 2020; Bergey & Ranellucci, 2021). Cornali's (2019) study found that participants described teaching as "stimulating", "exciting", "engaging" and "rewarding" which may feed into this notion of teaching as an intellectually stimulating job.

Table 27: Summary of studies on perceptions of teaching in the West (pre-service teachers)

Rating	Studies	Country
2*	Bergey & Ranellucci (2021)	US
	Cornali (2019)	Italy
	Fokkens-Bruinsma & Canrinus (2012)	The Netherlands
	Giersch (2021)	US
	Gratacós, López-Gómez, Nocito & Sastre (2017)	Spain
	Heinz, Keane & Foley (2017)	Republic of Ireland
	Hogan, Reid & Furbish	New Zealand
	Ivanec (2020)	Croatia
	Lin, Shi, Wang, Zhan and Hui (2012)	US
	Watt & Richardson (2007)	Australia
	Watt & Richardson (2008)	Australia
	Watt et al. (2012)	Australia/US/ Germany/Norway
	Williams & Forgasz (2009)	Australia
	Yu (2011)	US

In terms of pay, pre-service teachers tend not to rate this highly (Fokkens-Bruinsma & Canrinus, 2012; Lin et al., 2012; Gratacós et al., 2017; Heinz et al., 2017; Ivanec, 2020; Bergey & Ranellucci, 2021). However, there are some differences with how low this is rated based on context. For instance, Watt et al.'s (2012) research showed that the German sample rated salary just above the midpoint whereas Lin et al.'s (2012) study in the US revealed that respondents rated salary very low. This links to OECD (2022) reports which highlight that when comparing data for at least on level of education, US teachers' actual salaries amount to 65% or less of the earning of similarly educated worked. On the other hand, in Germany, upper secondary teachers' salaries match similarly education workers. Pre-service teachers in the Republic of Ireland perceptions suggest a decrease in perceptions of salary from 2006 to 2013 which may indicate a contextual change.

Career satisfaction for trainee teachers is universally strong (Williams & Forgasz, 2009; Yu, 2011; Lin et al., 2012; Watt et al, 2012; Fokkens-Bruinsma & Canrinus, 2012; Heinz et al., 2017; Gratacós et al., 2017; Ivanec, 2020). There also may be a link with career satisfaction and other factors. For example, Ivanec (2020) found that those who rated

themselves as more emotionally competent perceived teaching as more demanding and they also expressed a higher level of satisfaction with their career choice.

Reports of social dissuasion were generally moderate to low (Watt et al., 2012; Heinz et al., 2017; Gratacós et al., 2017; Ivanec, 2020) although there were some differences noted in certain counties. In the US and Australia, social dissuasion appears to be slightly higher (Watt and Richardson, 2008; Yu, 2011; Lin et al., 2012). In contrast it was rated as very low in The Netherlands (Fokkens-Bruinsma & Canrinus, 2012) demonstrating the impact of contextual influences.

In summary it would appear that pre-service teachers believe that teaching is a career which is demanding and requires expertise. At the same time, perceptions of salary and status are moderate, and teachers are often subject to moderate levels of social dissuasion. Despite this, career satisfaction is high.

In-service teachers

Four studies included in the review looked at perceptions of in-service teachers (Table 28). One of these was rated 3* and this will be discussed first.

Table 28: Summary of studies on perceptions of teaching in the West (in-service teachers)

Rating	Studies	Country
3*	Han and Rossmiller (2004)	US
2*	Howes and Goodman-Delahunty (2015)	Australia
	Moreau (2015)	England/France
	Sclan (1993)	US

Han & Rossmiller's (2004) study found that for those who left teaching, salary was a major factor in their decision to leave. The findings also indicate that there are gender differences in perceptions of salary, with makes males more likely to be sensitive to salary differences. Studies often suggest that salary may be a reason why fewer people choose teaching and this finding highlights that salary might also impact retention, as well as recruitment.

In a similar vein, Howes and Goodman-Delahunty (2015), whilst looking at motivations for choosing teaching, also investigated reasons for considering and making a career change away from teaching. The main theme reported by teachers as prompting them to consider a career change or make a career change was issues with teaching (63%). Issues appeared to relate demands of teaching: workplace conditions, student behaviour, workload and stress. Moreau's (2005) study also suggested that perceptions of the demands of teaching are negative, highlighting that often what drew in-service teachers to teaching was not always the reality. For example, English teachers commented on the increased scrutiny and control, as well as on how their work had been redefined in narrow terms, with a heightened focus on exam results. These studies suggest the demands of the job are a concern for some in-service teachers.

In summary, studies of in-service teachers' perceptions appear to highlight that salary and the demands of teaching are aspects cited by those who are dissatisfied with teaching and are considering changing career, or a who have. This is an area that would be interesting for further exploration, particularly comparing in-service teachers who are satisfied with their choice of career and whether perceptions differ in terms of salary and task demand or whether the weighting of such beliefs about teaching differ.

7.3.5 Summary

The studies suggest that across regions, teaching is generally seen as a profession which requires hard work and expertise, aside from in China where teaching appears not to be viewed as a particularly demanding or expert career. Perceptions of status and salary are rated lower.

Those who have chosen to teach are generally satisfied with their decision, despite viewing it as a demanding career with lower levels of pay and respect. This finding links to the literature on motivation which suggests that those who are interested in teaching are less likely to be motivated by job security and social influence.

For secondary students and undergraduates, teaching does not appear to be a career with high levels of interest. Studies which surveyed percentages of those who were

interested often come up with figures around 50% (e.g., Hong Kong, US). There are some differences in perceptions such as Nigeria and UAE where perceptions of teaching as a profession are negative and in Morocco where they are more positive. However, research does indicate that beliefs about teaching do not necessarily correlate with career values which are important to those who have not yet decided whether to pursue teaching as a career.

7.4 Are there differences in motivational factors and perceptions of teaching between gender?

A number of the studies rated as 3* in this review examine gender differences. All of the 3* studies which compared gender difference were carried out in Western countries. A number of studies rated 2* also examined gender differences. These studies were carried out in Western countries, the Middle East, Africa and East and Southeast Asia (Table 29). It is important to note that some studies compared motivations and perceptions between genders, whereas others gathered data from one gender.

Table 29: Summary of studies on motivations and perceptions of teaching exploring gender

Rating	Studies	Country	Sample
3*	Mangieri (1984)	US	Secondary students
	Argentin (2013)	Italy	In-service
	Gorard, Ventistia, Morris & See (2021)	England	Undergraduates
	Elfers, Plecki, St. Jon &Wedel (2008)	US	Undergraduates
	Han and Rossmiller (2004)	US	In-service
	Lai, Chan, Ko & So (2005)	Hong Kong	Secondary students
2*	Abotsi, Dsane, Babah and Kwarteng (2020)	Ghana	Pre-service
	Bergey & Ranellucci (2021)	US	Pre-service
	Christensen (2020)	US	Secondary students
	Argentin (2013)	Italy	Teachers in schools
	Bakar, Mohamed, Suhid & Hamzah (2014)	Malaysia	Pre-service

	Dickson (2013)	UAE	Secondary students
	Giersch (2021)	US	Undergraduates
	Alloush, Chaleila and Watted (2021)	Israel	Pre-service
	Gratacós, López-Gómez, Nocito & Sastre (2017)	Spain	Pre-service
	Htang (2019)	Myanmar	Pre-service
	Heinz, Keane & Foley (2017)	ROI	Pre-service
	Hunter (1998)	US	Secondary students
	Johnston, McKeown & McEwen (1999a)	Northern Ireland	Pre-service
	Johnston, McKeown & McEwen (1999b)	Northern Ireland	Secondary students
	Judge (2004)	US	Secondary students
	Keck Frei, Berweger & Bieri Buschor (2017)	Switzerland	Secondary/undergraduates
	Klassen, Granger & Bardach (2021)	UK	Undergraduates
	Kılınç, Watt and Richardson (2012)	Turkey	Pre-service
	Lee, Kang & Park (2019)	South Korea	Pre-service
	Moran, Kilpatrick, Abbott, Dallat & McClune (2001)	Northern Ireland	Pre-service
	Moreau (2015)	England/France	Teachers in schools
	Nano, Kallçiu & Mita (2019)	Albania	Pre-service
	Tusin (1991)	US	Undergraduates
	Wong (1994)	US	Secondary students
	Yüce, Sahin, Koçer and Kana (2013)	Turkey	Pre-service
	Wood (2001)	US	In-service

7.4.1 Interest in teaching

Female secondary students are more likely to indicate an interest in teaching (Mangieri, 1984; Wong, 1994; Lai et al., 2005; Johnston et al., 1999b). Christensen's (2020) found that student's gender was a predictive factor only for the dependent variable of whether the individual would consider teaching.

Studies which looked a gender difference of undergraduates reported similar results. Gorard et al.'s (2021) study found that not only were women more like to consider teaching (62% v 55%), they were also much more likely to intend to become a teacher (24% v 14%). Similarly, Elfers et al.'s (2008) found that there was a difference between those *willing* to consider teaching (F= 45% v M= 37%), with more males undecided (M= 12% v F=5%).

It is therefore not surprising that data samples of pre-service and in-service teachers include a higher percentage of females (e.g., Abotsi et al., 2020). Abotsi et al.'s (2020) study of pre-service teachers found that females prefer teaching as a career relative to their male counterparts.

In summary, the results indicate teaching is a career which is of greater interest to females than males and that more women pursue teaching. Subsequent sections will explore motivations and perceptions of teaching, looking at whether there is a gender difference.

7.4.2 Motivations

Salary and salary differentials between teaching and other jobs are more of a concern for men than women (Johnston et al., 1999a; Han & Rossmiller, 2004). Johnson et al.'s (1999b) study of secondary students found there was a statistically significant difference between the importance males and females attached to salary. This is further supported by Judge's (2004) study which indicated that salary was important in choice of career for males and that their perception of a teacher's salary was lower than their expectation. This suggests that perception of low pay may be more likely to deter men, which is supported by Wood's (2001) finding that males considered salary as a deterrent. It is not surprising therefore that Han and Rossmiller (2004) found that, for men, lower salary was a decisive reason for leaving the profession.

Looking at studies which explored how people might be incentivised to consider teaching, Giersch's (2021) study indicates that when exposed to different treatments (intrinsic, altruistic and extrinsic) the extrinsic reward treatment had a statistically significant relationship with career interest for males but not females. This links to findings from Elfers et al. (2008) who found that men (as well as those in STEM subjects) were more likely to be motivated by financial factors, such as loan forgiveness than women.

Other factors which usually fall under extrinsic motivations in the literature include working conditions, job flexibility or transferability. Although studies often concluded that males are more motivated by extrinsic factors, care does need to be taken as to what factors are being referred to. For example, Nano et al.'s (2019) research indicated that females tend to be driven more by favourable working hours and holidays than male respondents do when choosing teaching. Equally, Garra-Alloush et al.'s (2021) study of female Israeli pre-service teachers and Cornali's (2019) research of female Italian pre-teachers found job security was a clear motivator for entering teaching. Although it must be noted that neither of these studies includes males, and so whether the security of teaching is more important to females than males, cannot be determined. However, the findings do indicate that secure employment may be an important motivation for women. This is supported by Mangieri's (1984) survey of both men and women, which found that of those who expressed an interest in teaching, girls cited job security as more important than boys.

This therefore suggests that whilst some aspects of what is termed extrinsic motivations might be more influential for men (for example, salary), this is not always the case. This is why broad categorisation of motives does not clearly illustrate gender differences in motivations successfully.

Working with children was found to be important in a number of regions. There also are differences in the importance attached to this by gender. Moran's (2001) study found that although the responses from all students indicated the positive influence of this factor, females were significantly more influenced than males. Argentin (2013) also highlighted that the difference between males and females in their teaching values factor was wanting to work with children, suggesting that this might be because of social circumstances for females in the care-technical divide. On the other hand, Heinz et al. (2017) demonstrated

that men in the 2013 cohort were more likely to rate working with children as important than females. But, it is also important to note that this was a period of economic recession which may impact the findings. Keck et al.'s (2017) study of only men found that for those who chose to go into teaching, working with children was an important reason; but a limitation of this is the lack of comparison with female motives.

The social contribution factor also appears to highlight some gender differences. Moran's (2001) study found that females were significantly more influence than males for a desire to serve society and Argentin (2013) found that male choice to teach is less oriented by altruistic values, as well as intrinsic values. On the other hand, Lee et al. (2019) found that male teachers were more likely to be motivated by altruistic factors, such as the desire to benefit or influence the next generation or young people.

The slightly more complicated view of whether females are more likely to be motivated by working with children and the social contribution factor is further supported by Bakar et al. (2014) who found that regardless of gender, what they termed 'altruistic' motives was rated as the most important by both male and female student teachers, with little difference between them. This also links with Giersch's (2021) research which found that the altruistic treatment had similar results for both men and women.

Giersch's (2021) study also analysed the results of the intrinsic rewards treatment, finding that this had a significant association with interest in teaching for females but not males. This links to findings from Yüce's (2013) study of both men and women which suggests that women are more likely to report intrinsic motives then men. Female Arab teachers in Gara-Alloush et al.'s (2021) study rated intrinsic motivations as the key driver; however, a limitation of this (Gara-Alloush et al., 2012) study is that it did not compare the results of males, only sampling females.

Some studies also indicated gender difference in social influence. Nano et al. (2019) found that male students tend to be more influenced by others in choosing their teaching career than do female students. This notion of influence of others might also be why Mangieri's (1984) study highlighted that, for those who were not interested in teaching as a career, boys were more likely to cite the importance of improved respect of the

profession and working conditions as important. Yüce's (2013) study also found that (when looking at the item within their 'mercenary-based' extrinsic motives which they found were more important for males) the most frequently chosen motive was prestige and social status of teaching.

The notion of fallback career was examined in the previous section on regions and although not an influential factor in general, some studies suggest that it is *more* influential for men than it is for women. Argentin (2013) found that choice of teaching of a career was more frequently determined by chance, by the contingent matching of unemployed male candidates and working opportunities in the teaching labour force. Female teachers, instead, choose this job more frequently because it has been an aspiration and because they were interested in working with young people. Gratacós, et al. (2017) and Kılınç et al. (2012) also found that men more motivated by fallback than women, although the mean was still relatively low.

The results of this review of motivations therefore suggests that broad definitions, as previously discussed, are not necessarily helpful in comparing motivations of males and females. The studies do, however, suggest that males appear to be more likely to be motivated by salary than females and are more concerned with social influence, including the prestige and status of teaching. Fallback career is also more likely to be a reason for choosing teaching for men, although the means for this are still relatively low.

The results also suggest that women may be potentially more likely to be motivated by what has been termed 'altruistic' reasons, although these do also seem to be important for males. Equally, women may be more likely to be motivated by 'intrinsic' reasons; however, given the broad categorisation of these terms in the literature, analysis of the motives within these might not tell the same story.

7.4.3 Perceptions

Women are more likely to view teaching as higher in demand and expertise than men (Kılınç et al., 2012; Gratacós et al., 2017; Heinz et al., 2017). This is also reflected in Bergey & Ranellucci's (2021) study which found than men were over-represented in the profile which was more likely to report low perceptions of the demands of teaching. The

same group were also more likely to report lower perceptions of salary and status, ability beliefs and values, and relatively high costs. They suggest that this profile may reflect social pressures for males to earn high salaries or men's concerns about joining a career in which they are underrepresented group.

Other studies report slightly more mixed results in relation to salary and status. Two studies (Gratacós et al., 2017; Lee et al., 2019) found that men scored higher on social status and salary. On the other hand, Johnston's (1999a) also found that both males and females viewed teaching as similarly high status when compared to other occupations. The differences cannot be accounted for the participant focus as all four surveyed pre-service teachers. It would also appear that these differences are not due to regional differences as both Gratacós et al. (2017) and Johnston (1999a) research were carried out in Western countries yet yielded differing results.

In addition to females being more likely to view teaching as higher in demand, they were also generally found to be more satisfied with their choice of career (Kılınç et al., 2012; Gratacós et al., 2017) and experienced less social dissuasion (Heinz et al. 2017; Kılınç et al., 2012; Gratacós, 2017). The fact that they experienced less social dissuasion about their decision to teach may be reflective of the profession being dominated by females, or potentially the view that teaching is better suited to women.

This view that teaching is a career better suited to females was explored in a few studies. Johnston's (1999b) study found that more female secondary school students (67%) than males (33%) were considering teaching as a career. Females were also more likely to consider primary teaching than secondary. The study also sought to determine perceptions of whether teaching is viewed as a 'male' or 'female' career, finding that one third were unsure as to whether teaching is usually preferred by men or women, and 42% seeing it as dominated by neither sex. This suggests that although teaching is 'more likely' to be considered by females, perceptions of teaching do not match this. Other data did suggest, however, that there is a bias towards females as the 'better' primary school teachers. This perception of whether primary teaching is viewed as a more 'female' profession was also explored by Johnston (1999a) with male pre-service teachers. He

found that males who choose primary teaching as a career did perceive it to be ‘a job suited to females, but not exclusively a woman’s job’ and ‘a career choice which might be seen by their peers as inappropriate for males’. Klassen et al. (2021) also found that results suggested that Omani students potentially see teaching as a more feminized profession and Dickson et al.’s (2013) study also found that male students in the UAE see teaching as a feminised profession.

In summary, it appears that men are more likely to perceive teaching as lower in demand and expertise. Salary and status are more mixed, and although gender differences were reported, these were not consistent across studies. The findings also illustrate that women are more likely to experience higher levels of career satisfaction and less social dissuasion. Research also indicates that teaching may be seen as a more ‘female’ profession, particularly primary school teaching.

7.4.4 Summary

In nearly all countries, more women choose to teach than men. Males appear to be more concerned with social influence than females, with the prestige and status of teaching more important. Men appear to be more influenced by societal expectations and are therefore less likely to choose primary. This links with the findings that men are more likely to experience social dissuasion than females, suggesting that teaching is perceived by society as a ‘female’ career. Men are also more likely to perceive teaching as lower in demand and expertise than women. With regards to career satisfaction, women are more likely to experience higher levels.

Chapter 8
WHY DO TRAINEE TEACHERS IN ENGLAND CHOOSE TEACHING AS A CAREER?

8.1 Introduction

This chapter presents the findings from the primary research, which answers research question 2:

Research question 2: Why do postgraduate teacher trainees in England choose teaching as a career?

(a) Who are the trainees?
(b) What are their motivations?
(c) Do their motivations to teach differ by age, gender, career choice and choice of and training routes?
(d) What are their perceptions of the teaching profession in England?
(e) Do their perceptions of teaching differ by age, gender, career choice and choice of training routes?
(f) How far do trainees experience social dissuasion and are they satisfied with their decision to teach?
(g) Do levels of social dissuasion and career satisfaction differ by age, gender, career choice and choice of route?

8.2 Background characteristics: Who are the trainees?

The sample of trainees in Survey 1 was 645. Over three-quarters were females, and over a third were under 25 (Table 30).

Table 30: Background characteristics of the trainees (N = 645)

Background characteristics	Frequency	Percentage (%)
Gender		
Female	491	76
Male	154	24
Age		
18-24	230	36
25-44	224	35
45-64	108	17
45-54	74	11
55-64	8	1
Not indicated	1	
Highest educational qualification		
Undergraduate	497	77
Higher	148	23
Undergraduate degree class		
1st	156	24
2:1	315	49
Below 2:1	174	27
Training route		
University-led	196	30
School-led	451	70
Teaching as a 2nd career		
Yes	306	47
Phase of education		
Primary (including early years)	258	40
Secondary	380	59

The trainees in the sample are slightly older than the national population of initial teacher trainees. Compared to the 2019/20 national student population (DfE, ITT Census, 2019b),

there were fewer students below the age of 25 in the achieved sample (36% vs 50% in the national population). There were more female students in this sample than the national ITT student population (76% vs 71%).

The study sample also has more trainees on a school-led route. Approximately 70% of participants were training to teach via a school-led route compared to 55% in the national population. Over half of participants were training to teach a secondary subject (59%), 40% were training to teach in primary schools, and 1% did not select what phase they were training to teach.

Close to three quarters (73%) of the study sample had a 2:1 or above in their undergraduate degree. This is similar to the national figure of 74%. Over three quarters (77%) of the sample's highest qualification was an undergraduate degree, with 23% holding a higher qualification. Nearly half of all participants had a previous career (47%), most of these had either a professional occupation (14%) or a managerial position (10.9%).

8.3 What motivates trainee teachers in England to go into teaching?

The strongest motivating factors for post-graduate trainees to want to go into teaching are their interest in working with children, innate interest in teaching and desire to contribute to society. Family and friends are not strong influence in their decisions to be teachers. Most also do not report going into teaching as a fallback career. Nearly half of the trainees had other jobs before turning to teaching (Table 31), indicating that although teaching may not have been their first-choice career, it was certainly not their last resort.

These findings are consistent with those of the TALIS international survey and a number of studies which also utilised the FIT-Choice Scale (e.g., Bergey & Ranellucci, 2021; Fokkens-Bruinsma & Canrinus, 2012a; Glutsch & König, 2019; Gratacós et al., 2017; Watt & Richardson, 2007; 2008). Intrinsic motivations appear to be important to trainee teachers who express a desire to want to work with children and because of belief in their

own ability to teach. Several studies have found similarly found intrinsic factors as attractors (e.g., Konig & Rothland, 2012; Fokkens-Bruinsma & Canrinus, 2014; Glutsch & König, 2019; Heinz et al., 2017; Moreau, 2015).

The desire to contribute to society (social contribution) is also shown to be a motivator in other studies (e.g., Argentin, 2013). This perhaps highlights that not only is teaching an intrinsic profession, but also an altruistic one, drawing those that not only want to teach because they think they will be good at it and because they want to work with children, but because they believe they can make a difference.

Table 31: Mean ratings for motivations of trainee teachers

Factor	Mean	Standard Deviation
Work with children	5.69	1.466
Innate interest in teaching	5.57	1.230
Social contribution	5.39	1.590
Positive school experience	5.10	1.884
Job security	5.04	1.723
Family friendly	3.68	2.063
Job flexibility	3.25	2.127
Social influences	3.19	2.001
Fallback	1.43	1.190

For some participants, positive school experiences, such as having inspirational teachers, persuaded them into teaching. This accords with other studies, including both secondary students (e.g., Wong, 1994) and undergraduates (e.g., Gorard et al., 2021).

While teachers can be strong role models encouraging young people to aspire to be teachers, the influence of friends and family (aka social influence) is not always positive. In fact, in a number of studies young people have been discouraged from teaching by family and friends (e.g., Richardson & Watt, 2006; Watt and Richardson, 2007, 2008; Berger & D'Ascoli, 2012; Eren & Tezel, 2010; Kilinic et al., 2012).

In this study, the majority of participants indicated that they did not enter teaching as a last resort (fallback career). The mean rating for this factor is 1.43 out of a total score of 7, indicating that teaching was not a job that they 'fall' into to because they could not find anything else. This finding is consistent with other research (e.g., Watt & Richardson, 2007; Eren & Tezel, 2010; Watt, Richardson & Wilkins, 2014).

8.4 Do trainees' motivations differ by age, gender, career choice and training routes?

One of the limitations of studies which use the FIT-Choice scale is that they do not often consider potential exogenous factors, such as background characteristics. This section explores whether motivations to teach differ by other factors: age, gender, career choice and training route.

To recapitulate, the key motivating factors are broadly classified into nine categories:

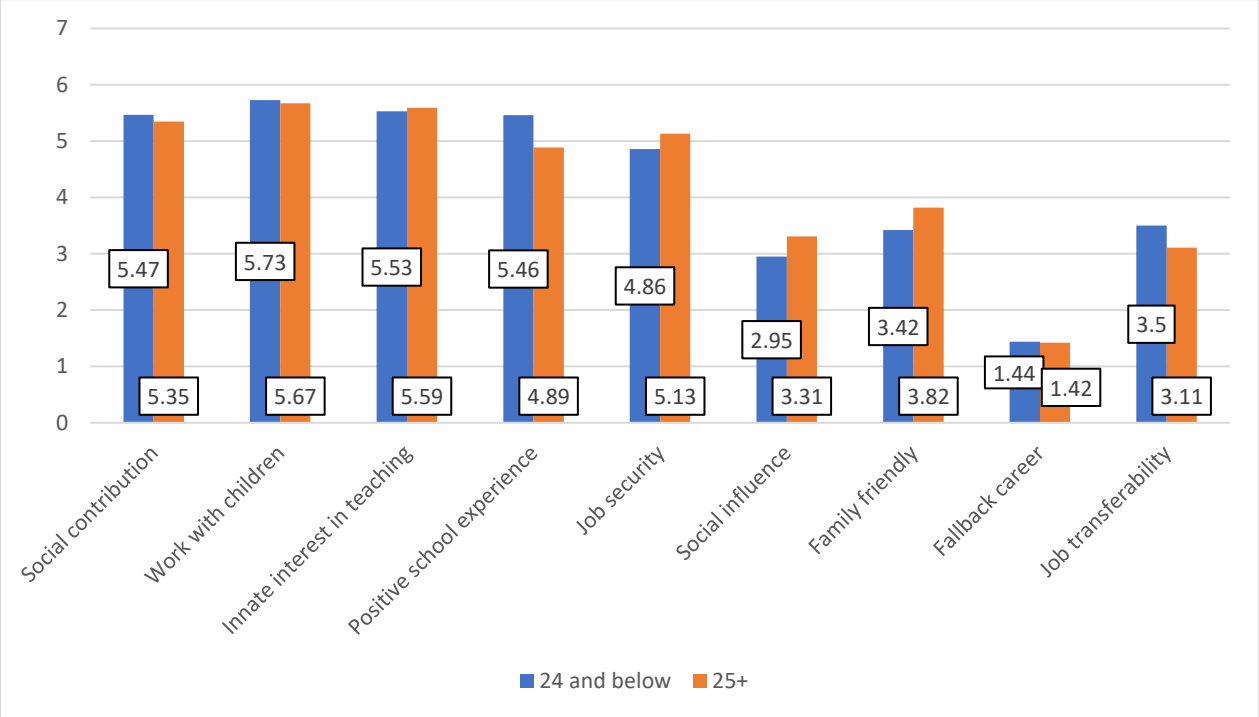
- Desire to make a social contribution
- Interest in working with children
- Innate interest in teaching
- Positive school experience
- Job security
- Social influence
- Family friendly
- Fallback career
- Job flexibility

8.4.1 Motivations of older and younger trainees

The results show that older and younger trainees are very similar in the factors that motivate them to join teaching (Figure 19). However, older trainees are more likely than younger trainees to rate job security (effect size = - 0.16), social influences (effect size = -0.18) and teaching as a family friendly career (effect size = 0.19) as more important. A

positive school experience (effect size = +0.30) and job flexibility (effect size = +0.18) on the other hand, are more important to young trainees.

Figure 18: Comparison of motivations of trainees by age



Given that the 24 and below age group have been out of school for less time, it is perhaps unsurprising that they may be more motivated by positive school experiences. This might be interesting to consider further in terms of recruitment policies. Recruitment initiatives in England tend to focus on attracting prospective teachers with the message that they can be inspirational teachers, making a difference to young people's lives, rather than highlighting and drawing on the impact of one's own experiences of inspirational teachers.

Those aged 24 and below are also more likely to choose teaching because of job flexibility. This may be because the younger group are more likely to consider different life possibilities and thus the availability of jobs elsewhere, such as abroad, is more important in terms of career choice (Williams, 2013). These differences are relevant to recruitment efforts as policies which emphasize different motivations may be more likely to attract different age groups. For instance, policies which play on the notion of teaching

as a family friendly career offering job security might be more likely to attract those over 25.

Table 32: Comparison of effect size for each of the motivating factors by age

Factor	Effect size
Positive school experience	0.30
Job flexibility	0.18
Social contribution	0.07
Work with children	0.04
Fallback career	0.016
Innate interest in teaching	-0.05
Job security	-0.16
Social influences	-0.18
Family friendly	-0.19

[*The effect sizes indicate the magnitude of the difference between the groups being compared. The reference group is those 24 and below. Therefore, a negative effect size indicates that the older group rates those factors more highly than the younger trainees.*]

8.4.2 Motivations of men and women

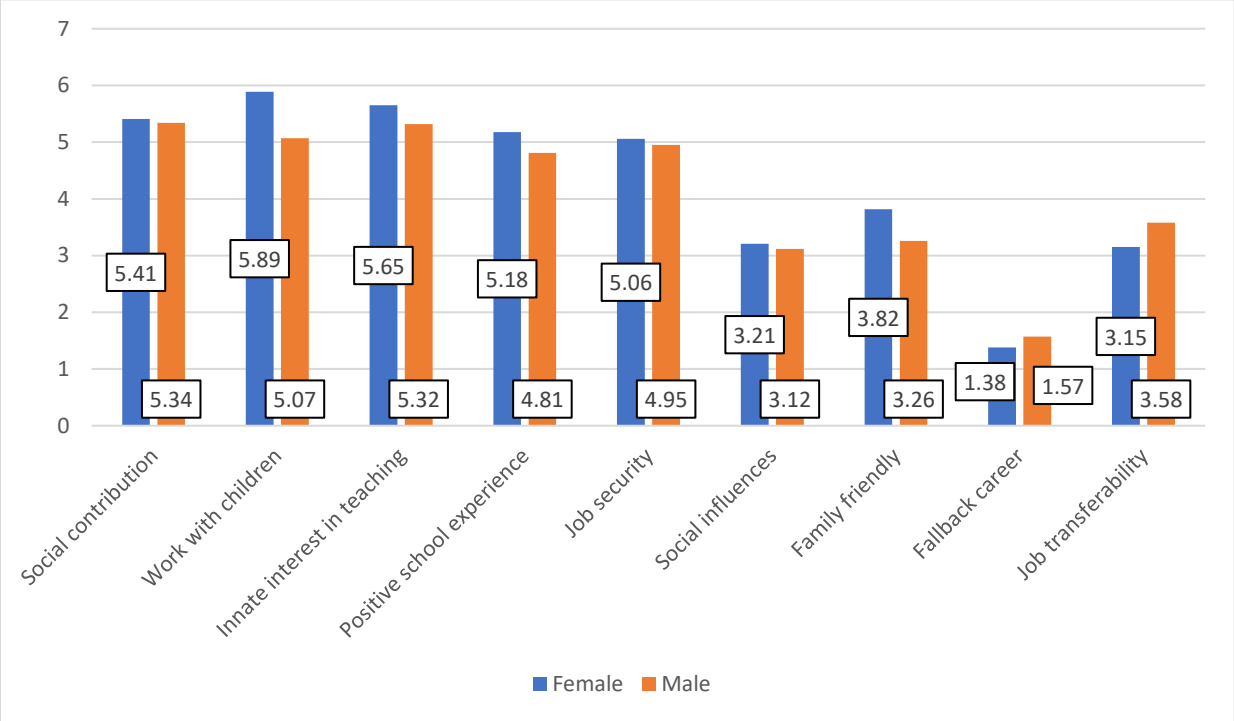
While there are only a few smaller differences in the motivation of trainees by age bar one, the data from the survey suggests more differences between males and females (Figure 19). This has important implications for recruitment policies that attempt to attract more males into the teaching profession.

In general, females are more likely to report being motivated by their interest in working with children (effect size = +0.56), teaching being a family friendly profession (ES = +0.27) and their belief in their ability to be good teachers (ES = +0.27). Men, on the other hand, are more likely to say that they are attracted to teaching because of the availability of teaching jobs in different locations, including abroad (ES = -0.20). These findings are consistent with those of the systematic review which found that women are more likely to report being motivated by intrinsic and altruistic reasons. Although for most trainees

teaching is not a fallback career, men are slightly more likely than women to regard teaching as a second-choice career (ES = -0.16).

For the other factors, men and women are similarly motivated (see Table 33 for the effect size differences).

Figure 19: Comparison of motivations by gender



Although there are examples of previous studies which have analysed differences in trainee teachers' motivations by gender, almost all used ANOVA or MANOVA and significance tests to indicate whether there is a difference between groups or not (Watt, Richardson & Devos, 2013; Watt & Richardson, 2012). As explained before, significance tests alone do not and cannot suggest that the groups are different or how much they differ. The *p*-value in significance tests simply means that if we assume that there is no difference between the groups, how likely (or probability) are we to get the results that we do. This is a misunderstanding of significance tests.

Table 33: Comparison of effect size for each of the motivating factor by gender

Factor	Effect size
Work with children	0.56
Innate interest in teaching	0.27
Family friendly	0.27
Positive school experience	0.20
Job security	0.06
Social influences	0.05
Social contribution	0.04
Fallback career	-0.16
Job flexibility	-0.20

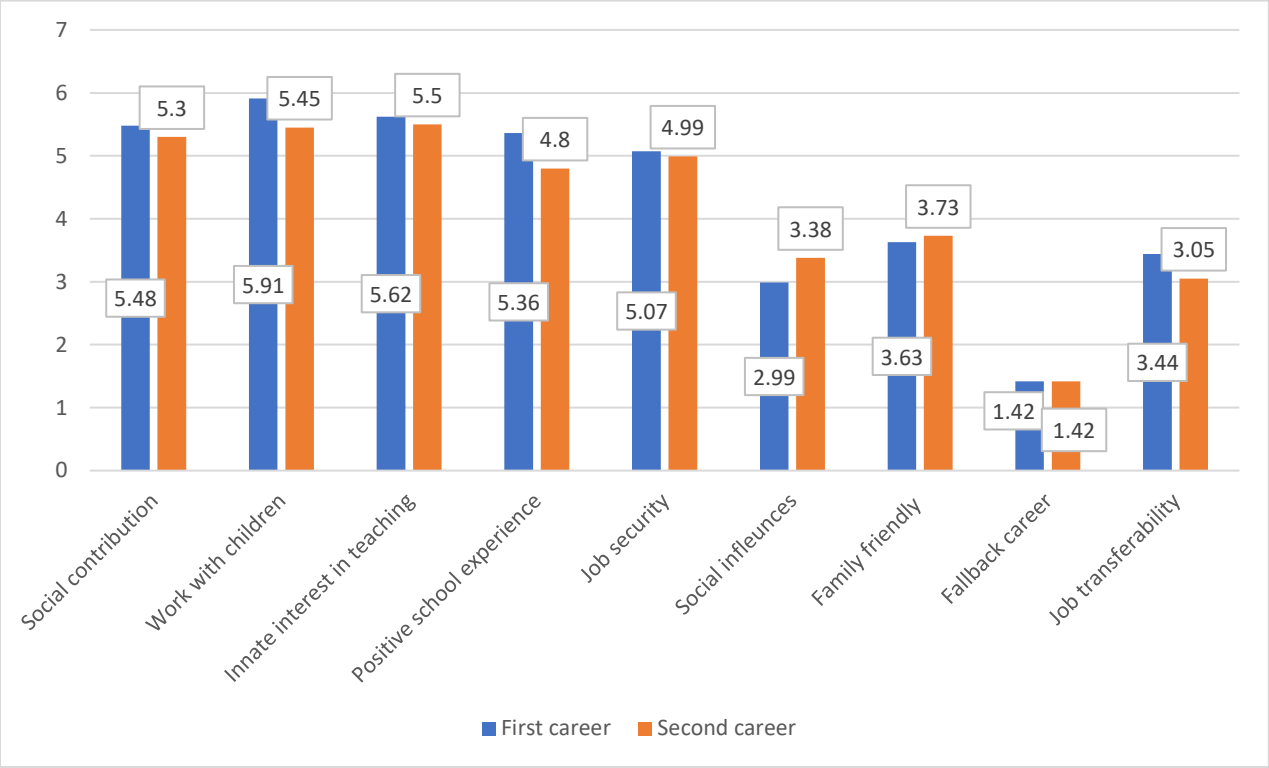
[*The reference group is the 'female' group.]*

8.4.3 Motivations of first-career trainees and career switchers

This study also surveys the motivations of first-career trainees (those who chose teaching as their first career) and career switchers (those who had previous careers prior to switching to teaching). Similar motivations are seen for both groups (Figure 20). Both first career trainees and career switchers reported being persuaded to train as teachers for predominantly altruistic and intrinsic reasons: the desire to make a difference to society and to work with children, as well as their belief in their own ability to be good teachers.

However, when effect size is calculated, some differences in motivations emerge. First-career trainees were more likely than career switchers to be influenced by their positive school experience (ES = -0.30) and their desire to work with children (ES = -0.31). Positive school experiences link to the findings for the younger age group (24 and below), perhaps because of the link between career switchers tending to be older than first-career trainees. However, the desire to work with children cannot be explained for this reason and appears to be specific to the first-time career teacher group. This would be interesting for research to further explore.

Figure 20: Comparison of motivations by first-career trainees and career switchers



Although trainees, in general, were not strongly influenced by friends and family (social influence) in their decision to go into teaching, career switchers were slightly more likely to be influenced by family and friends than first career trainees (ES = +0.20). The effect size comparison for the other motivating factors can be seen in Table 34.

Table 34: Comparison of effect size for each of the motivating factors by first-career trainees and career switchers

Factor	Effect size
Social influences	0.20
Family friendly	0.05
Fallback career	0
Job security	-0.05
Innate interest in teaching	-0.10
Social contribution	-0.11

Job flexibility	-0.18
Positive school experience	-0.30
Work with children	-0.31

[*The reference group is the 'Career switchers (second career)' group.]*

These findings may have implications for recruitment. Career switchers' motivations are important to understand as they have previously been targeted with policy initiatives and marketing campaigns. However, these findings suggest that there are some differences in terms of what motivates them to choose teaching as a second career. It is important to note that the findings relate only to those who have made the decision to change their career, but further research could explore how far motivations of those intending to switch careers and those who have made the decision to switch to teaching compare.

8.4.4 Motivations of trainees by university-led route and school-led route

Most of the motivation factors are very similar for both trainees on a university-led route and those on a school-led route (Figure 21). There are two main differences: university-led trainees a more likely to say that they are motivated by the chance to teach in different locations, including abroad (ES = 0.40); and they are more likely to be motivated by wanting to make a difference (ES = 0.21). The difference in job flexibility may be explained by the award of PGCE from universities which is recognised abroad. Although many school-led routes do result in a PGCE, there are school-led routes which do not. A simple search on the train to teach website for QTS only primary courses results in over 200, mainly appearing to be school-led. This may mean that prospective teachers for whom the flexibility of working abroad is more important, look to university-led routes first.

There are some additional differences, although not as big. School-led trainees are more likely to be influenced by the security of teaching (ES = -0.17) and the fact that it is seen as being family friendly (ES = -0.14) (see Table 35).

Figure 21: Comparison of motivations by choice of route

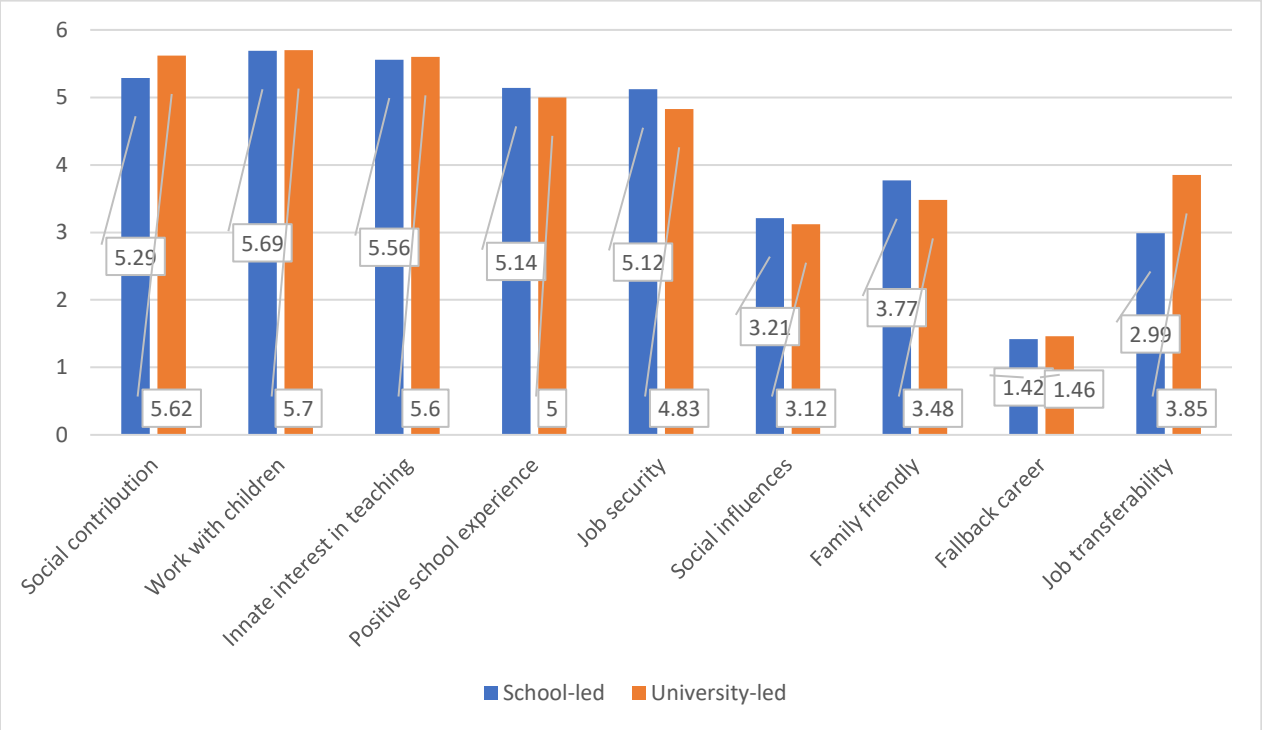


Table 35: Comparison of effect size for each of the motivating factors by choice of route

Factor	Effect size
Job flexibility	0.40
Social contribution	0.21
Innate interest in teaching	0.03
Fallback career	0.03
Work with children	0.01
Social influences	-0.05
Positive school experience	-0.07
Family friendly	-0.14
Job security	-0.17

[*The reference group is the 'university-led' group.]*

8.4.5 Summary

In summary, what motivates postgraduate trainees in England to be teachers are their reported desire to work with children and make a difference to society, and their interest

in teaching. Having a positive school experience and the perception of teaching as a stable job are other factors. Few would admit to teaching as their fallback career.

There is little difference in the motivations of older and younger trainees, but older trainees are more likely to rate job security and teaching being family friendly as important motivating factors. Younger trainees (under 24), on the other hand, are more likely to say that their positive school experience and the fact that teaching allows them to transfer easily to other jobs that persuaded them to be teachers.

Women and those for whom teaching is their first career are more likely to report that they want to be teachers because they want to work with children. Men and those who are on the university-led route are more likely to be attracted to teaching because of what they see as the flexibility of the profession, which offers them opportunities to work in different locations.

Wanting to make a difference to society was similar for all groups bar training routes. The university-led route was more likely to say that they were motivated by a desire to make a societal contribution.

Those for whom teaching is a first career, it was their positive school experience and desire to work with children that influenced their decision to be teachers (or so they reported).

8.5 What are trainees' perceptions of the teaching profession in England?

Overall, participants viewed teaching as a demanding job requiring a lot of hard work (Table 36). This suggests that it is not the heavy demands of teaching that put people off teaching as trainees enter teaching fully aware that teaching going to be hard work. Participants also viewed teaching as a job requiring professional training and special knowledge (M=5.43). Similar perceptions of teaching as a high demand job requiring expert knowledge were also recorded in other diverse cultural contexts in previous

studies (e.g., Watt & Richardson, 2007; Fokkens-Bruinsma & Canrinus, 2014; Kilinic et al., 2012; Eren & Tezel, 2010).

Table 36: Mean ratings for perceptions of trainee teachers

Factor	Mean	Standard Deviation
Demand	6.36	.893
Expert	5.43	1.283
Status	4.83	1.520
Salary	3.63	1.385

Postgraduate teacher trainees in England, on the other hand, do not perceive teaching as job which is particularly high status nor offering good salaries. This again suggests that it is not the status or the salary that puts these people off teaching. Prospective teachers are aware of the working conditions and the remunerations they get from teaching. Despite this, they still want to be teachers because their motivation is more for intrinsic and altruistic reasons, such as desire to contribute to society, interest in working with children and an innate interest in teaching.

Gorard et al.'s (2021) study showed that those who have decided to be teachers are more likely to rate altruistic and intrinsic motivation highly and downplay extrinsic factors like job security, status and salary. It is possible that these are post hoc justifications for prospective teachers' decisions to be teachers. Initial motives and post-hoc recollections can be quite different because of the possibility of the effects of socialisation and a rationalisation of teachers' own decision (Henoch et al., 2015). Some suggested that student teachers' recollection of making decisions about the profession and their perceived competencies might be romanticised (Bohndick et al., 2017). This is quite a well-known theory called cognitive dissonance reduction (Festinger, 1957). The findings in this study are consistent with that of previous work based on existing trainee teachers, which suggests that salary and other financial considerations are seldom key motivators (Davies & Hughes, 2018). Studies that include those who have not made the decision to be teachers, however, highlight the importance of these extrinsic factors as main

deterrents for those who might have otherwise considered teaching (Gorard et al., 2021). This has implications for teacher recruitment.

8.6 Do their perceptions of teaching differ by age, gender, career choice and training routes?

One of the limitations of studies which use the FIT-Choice scale is that they do not often consider potential exogenous factors, such as background characteristics. This section explores whether perceptions to teach differ by other factors: age, gender, career choice and training routes.

8.6.1 Perceptions of older and younger trainees

Both older and younger trainees appear to have similar perceptions of teaching as a demanding and high expertise job (Figure 22). Trainees also viewed teaching as a career which is respected but with lower levels of salary. There is no real difference between older (age 25 and over) and younger trainees (age 24 and below) in their overall views of teaching. Effect sizes show a similar picture, although indicates that (Table 37) older trainees may be marginally more positive about teachers' pay and salary than their younger peers. However, the difference is not clear.

Figure 22: Comparison of perceptions by age

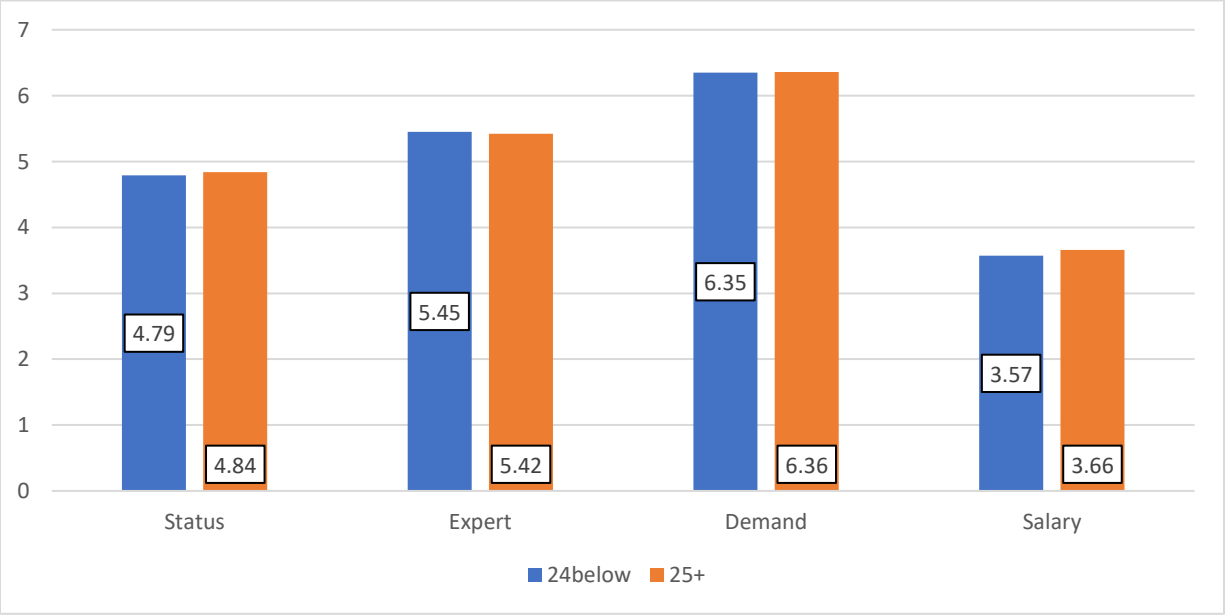


Table 37: Differences in the perceptions of teaching by age

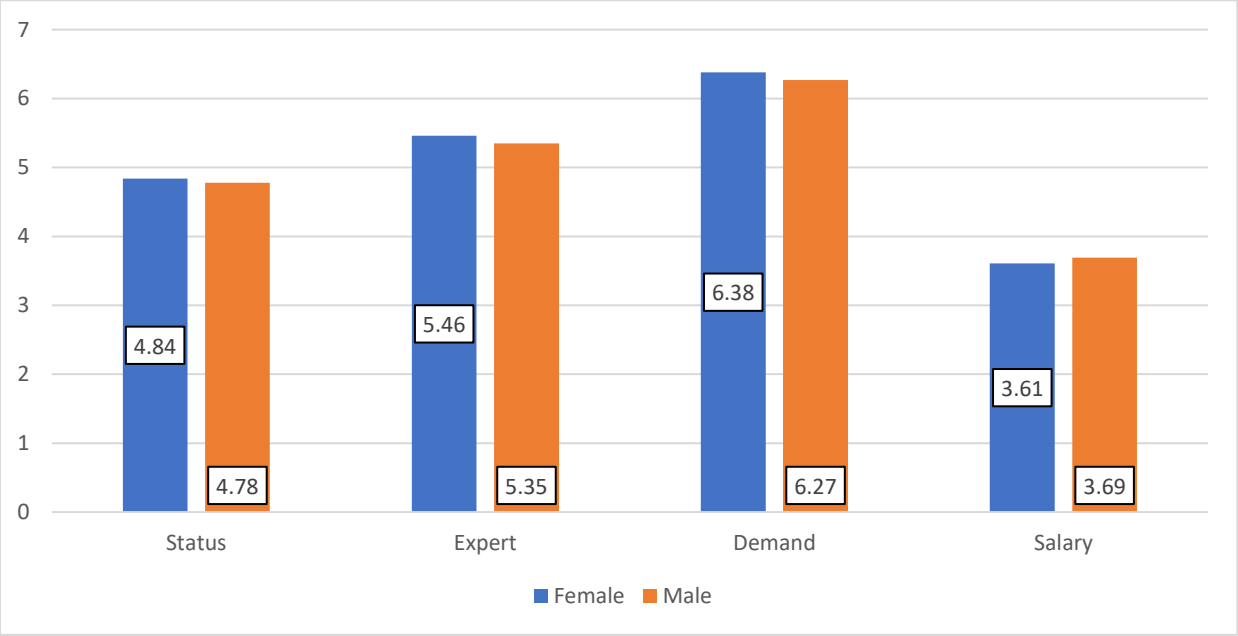
Factor	Effect size
Expert	0.02
Demand	-0.01
Status	-0.03
Salary	-0.06

[The reference group is the '24 and below' group.]

8.6.2 Perceptions of men and women

There is also little difference between male and female trainees in their perceptions of teaching as a demanding career requiring professional training and expert knowledge, but with lower perceptions of teaching as a high status profession with high salary (Figure 23). Female trainees are slightly more likely than their counterparts to view teaching as demanding job (Table 38).

Figure 23: Comparison of perceptions by gender



This finding concurs with that of the systematic review which indicate that women are more likely to see teaching as a demanding career. However, the difference reported in this primary research is only minimal.

Table 38: Differences in the perceptions of teaching by gender

Factor	Effect size
Demand	0.12
Expert	0.09
Status	0.04
Salary	-0.06

[*The reference group is the 'female' group.]*

8.6.3 Perceptions of first-career trainees and career switchers

Both groups see the profession as demanding and expert career with lower levels of task return (Figure 24). There is little difference between the perceptions of first-career trainees and career switchers as shown in the very small effect sizes (Table 39). Career switchers are only marginally more likely to perceive teaching as an expert career which is hard work and more respected. This concurs with the results of Wang's (2018) study of career switchers and first-time teachers in Scotland who similarly found that teaching is seen as demanding with relatively low returns.

Figure 24: Comparison of perceptions by first-career trainees and career switchers

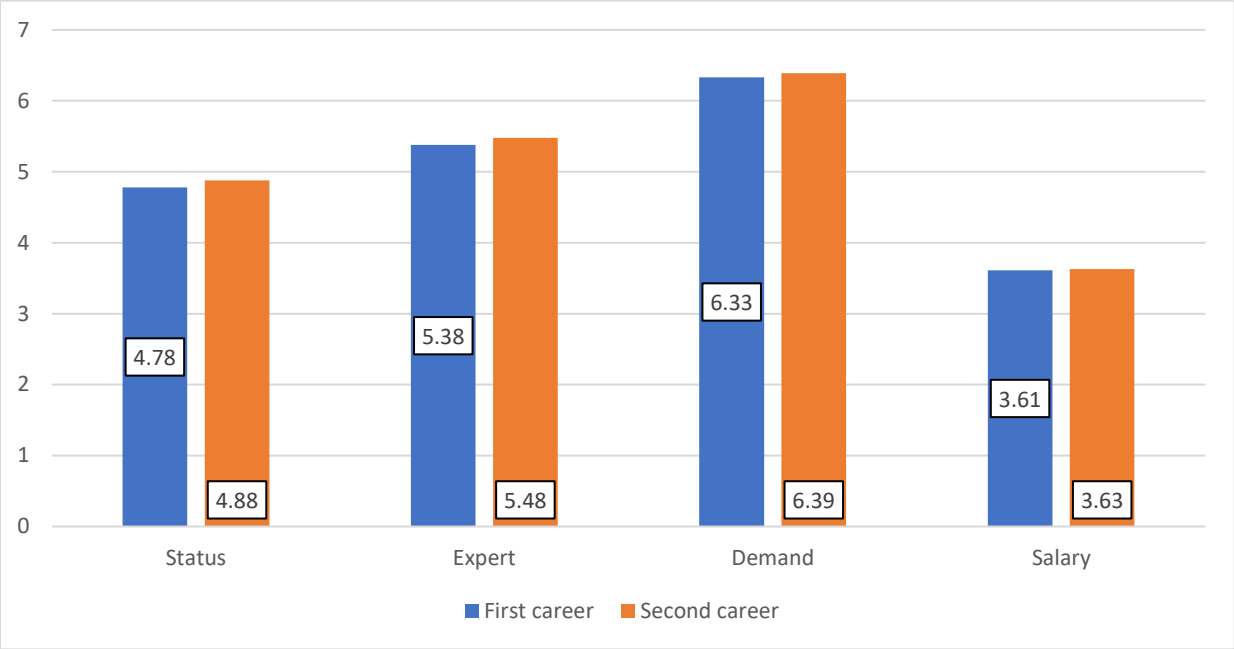


Table 39: Differences in perception of teaching by first-career trainees and career switchers

Factor	Effect size
Demand	0.07
Expert	0.08
Status	0.07
Salary	0.01

[*The reference group is the 'Career switchers (second career)' group.]*

8.6.4 Perceptions of trainees by university-led route and school-led route

All trainees, regardless of training routes, viewed teaching as a demanding career requiring professional training with low returns (Figure 25). Interestingly, those on the university-led route are more likely to consider teaching as lower in both status (ES = -0.22) and salary (ES = -0.34) than the trainee teachers on the school-led route (Table 40).

University-led trainees are also less likely to view teaching as a demanding (ES = -0.12) and expert career (ES = -0.12) compared to their school-led peers (Table 40).

Figure 25: Comparison of perceptions by training routes

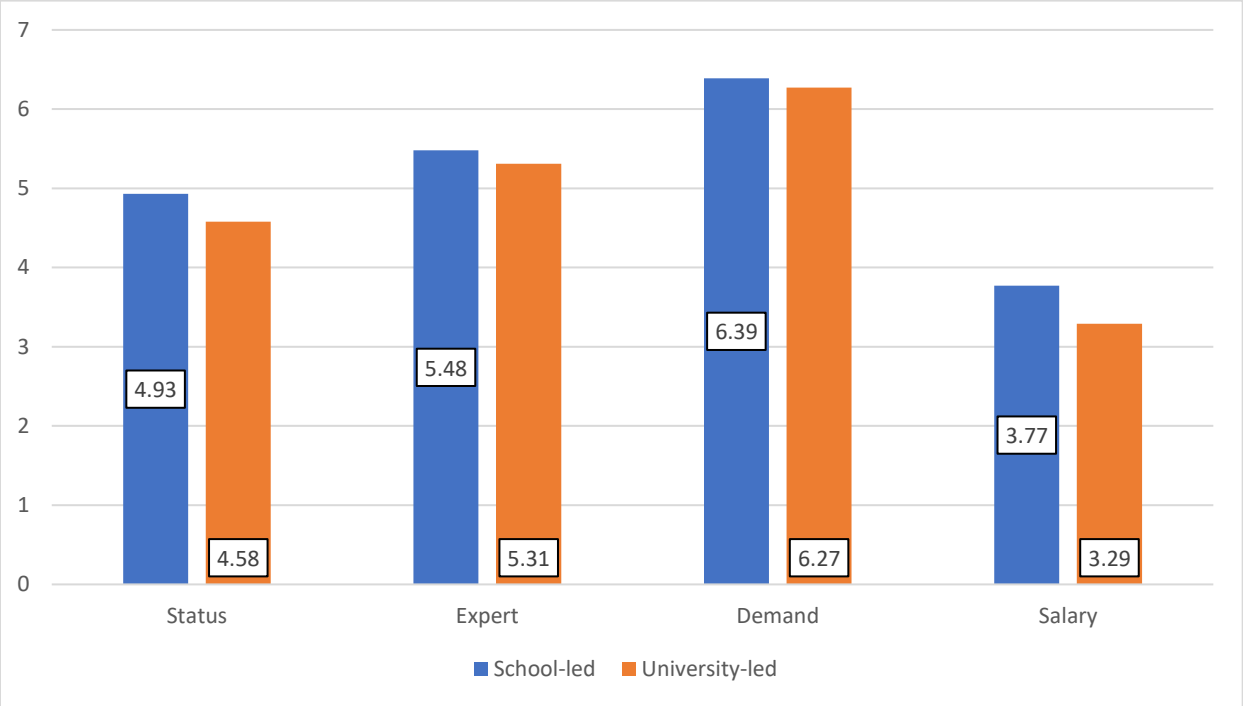


Table 40: Differences in the perception of teaching by trainees on different training routes

Factor	Effect size
Demand	-0.12
Expert	-0.12
Status	-0.22
Salary	-0.34

[*The reference group is the 'university-led' group.]*

No other studies have looked at the motivations of people on different training routes. This finding is therefore interesting as it suggests that those on school-led route, i.e., people who are more likely to be career changers and held other jobs (72% of career switchers are on a school-led route) are more positive about teachers' salary and status than those who entered training directly after graduation. This is only a relative comparison as both groups have a positive view of the status of teaching (mean score is 4.8 out of 7). Perhaps for those who want to be teachers anyway, salary and status are not deterrents. For career changers, they still choose teaching although they do not think teachers' salary is high.

8.6.5 Summary

The survey results show that initial teacher trainees in England generally perceive teaching as a highly demanding job requiring professional training and expert knowledge. But they do not see teaching as a particularly high status nor highly paid job. The only difference is between those on different training routes, with university-led trainees being more negative about the status and salary of teachers than those on school-led route. All of the other groups showed either marginal or no difference in perceptions.

Reassuringly, these findings are in accord with the international evidence from the systematic review which suggests that across regions and different phases of education, teaching is seen as a demanding profession requiring expert knowledge, but with relatively low remuneration.

These findings reinforce the fact that trainee teachers are not motivated by extrinsic rewards, like pay and status, but are attracted to teaching for intrinsic and altruistic reasons.

8.7 Career choice: How far do trainees experience social dissuasion and are they satisfied with their decision to teach?

The survey measured experienced levels of social dissuasion. This is different to how far others influenced them to choose teaching (i.e., how far they were motivated by others to choose to teach), instead focusing on whether after they had made the decision to teach, people tried to influence them to consider other career choices. Participants' levels of career satisfaction (how satisfied they were with choosing teaching as a career) was also measured.

The trainees surveyed reported low levels of social dissuasion (M=3.68 which is lower than the median) although the data does indicate that social dissuasion does still occur (Table 41).

With regards to career satisfaction, trainees report high levels of career satisfaction (Table 41). This suggests that even though trainees are aware of the demands of teaching as a profession and view the status and salary as lower, they are still satisfied with their choice of career.

Table 41: Mean ratings levels of social dissuasion and career satisfaction of trainee teachers

Factor	Mean	Standard Deviation
Satisfaction	6.13	1.087
Social dissuasion	3.68	2.044

8.8 Do levels of social dissuasion and career satisfaction differ by age, gender, career choice and choice of route?

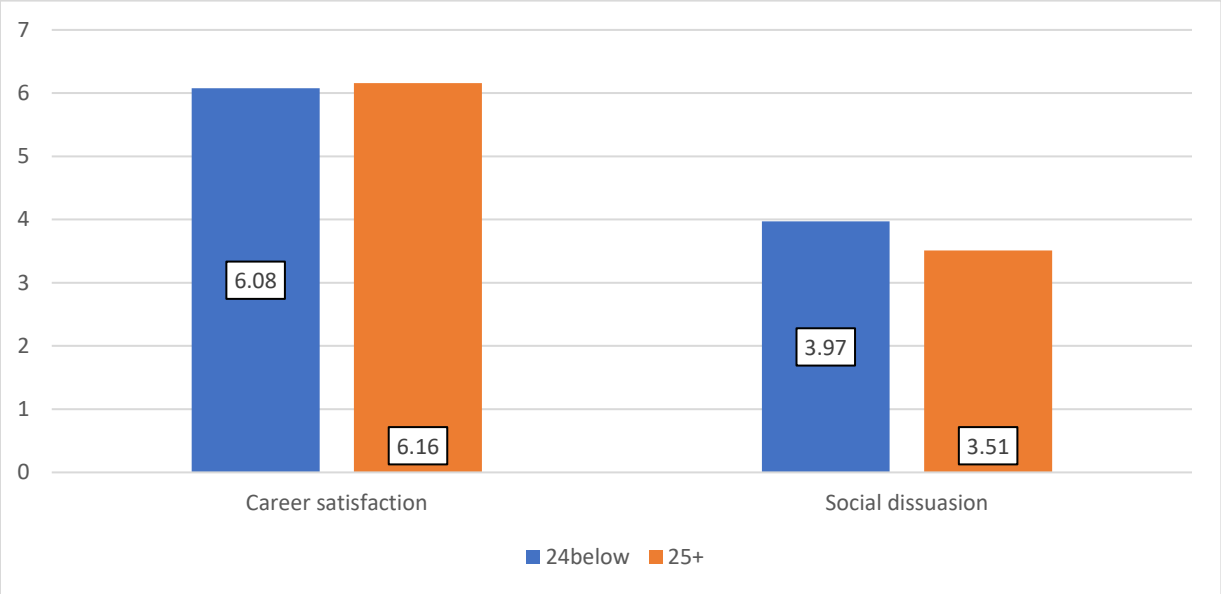
This section explores whether trainees reported levels of social dissuasion and career satisfaction differ by age, gender, career choice and training routes.

8.8.1 Social dissuasion and career satisfaction of older and younger trainees

The results (Figure 26) indicate that both older and younger trainees are satisfied with their choice of career. Only a marginal difference between levels of career satisfaction (ES -0.07) was reported (Table 42) indicating that there is no real difference with how far older and young trainees are pleased with their decision to teach.

Levels of social dissuasion, however, show a different picture. Although overall levels of social dissuasion are moderate, there is a difference with how far younger trainees experience this. They are more likely to report that they experienced people trying to influence them not to teach (ES = +0.21, Table 42).

Figure 26: Comparison of levels of social dissuasion and career satisfaction by age



Why this is the case is not clear. It may be that younger trainees are more likely to discuss career options with their peers for example, if they are at university, or recently finished) and are therefore more likely to experience social dissuasion. On the other hand, they could be more likely to experience social persuasion. Perhaps the difference lies in societies' perceptions of teaching more generally. The results of the systematic review suggest that those who do not want to pursue teaching have less positive views of teaching which may be why those who do choose to teach may experience dissuasion from others.

Table 42: Difference in levels of social dissuasion and career satisfaction by age.

Factor	Effect size
Social dissuasion	0.21
Career satisfaction	-0.07

[*The reference group is the '24 and below' group.]*

8.8.2 Social dissuasion and career satisfaction of men and women

Both groups indicate satisfaction with choosing teaching and moderate levels of social dissuasion (Figure 27). When effect size is considered, female trainees are more likely to report that they are satisfied with their choice of career (Table 43). This links to the findings of the systematic review which also indicated that women were more likely to be happy with their choice of teaching. It might also be reflective of the fact that teaching is a female dominated profession – perhaps levels of satisfaction are linked with representation and seeing oneself in the education system as a whole and the training cohort.

Figure 27: Comparison of levels of social dissuasion and career satisfaction by gender

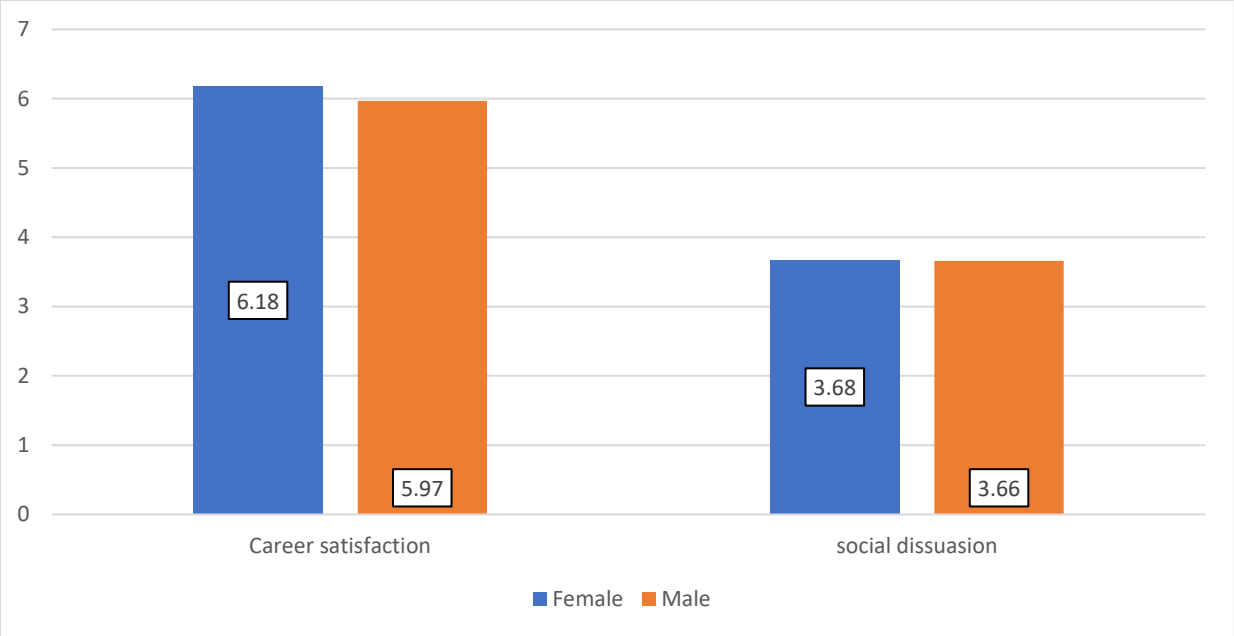


Table 43: Difference in levels of social dissuasion and career satisfaction career satisfaction by gender

Factor	Effect size
Career satisfaction	0.25
Social dissuasion	0.01

[*The reference group is the 'female' group.]*

8.8.3 Social dissuasion and career satisfaction of first-career trainees and career switchers

The survey results show that first-career trainees and career-switchers are highly satisfied with their career choice (Figure 28). The effect sizes (Table 44) between the groups are very small showing that there is hardly any difference in their responses.

Figure 28: Comparison of levels of social dissuasion and career satisfaction by first-career trainees and career switchers

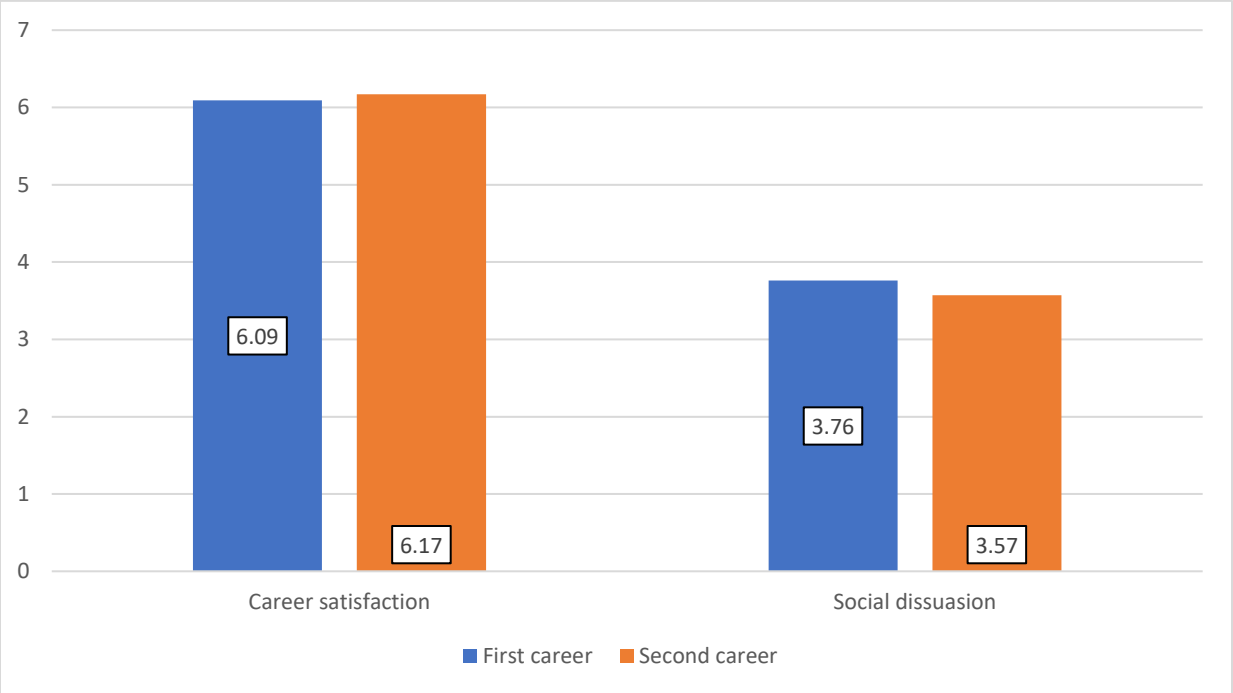


Table 44: Difference in levels of social dissuasion and career satisfaction by first-career trainees and career switchers

Factor	Effect size
Career satisfaction	0.07
Social dissuasion	-0.09

[*The reference group is the 'Career switchers (second career)' group.]*

8.8.4 Social dissuasion and career satisfaction of trainees by training routes

Trainees on both school-led and university-led routes expressed high satisfaction with their choice of career and experienced low levels of dissuasion from others about their

choice (Figure 29). There are hardly any differences between the groups (Table 45) although those on the university-led route are slightly less likely to report satisfaction with choice of career.

Figure 29: Comparison of levels of social dissuasion and career satisfaction by choice of route

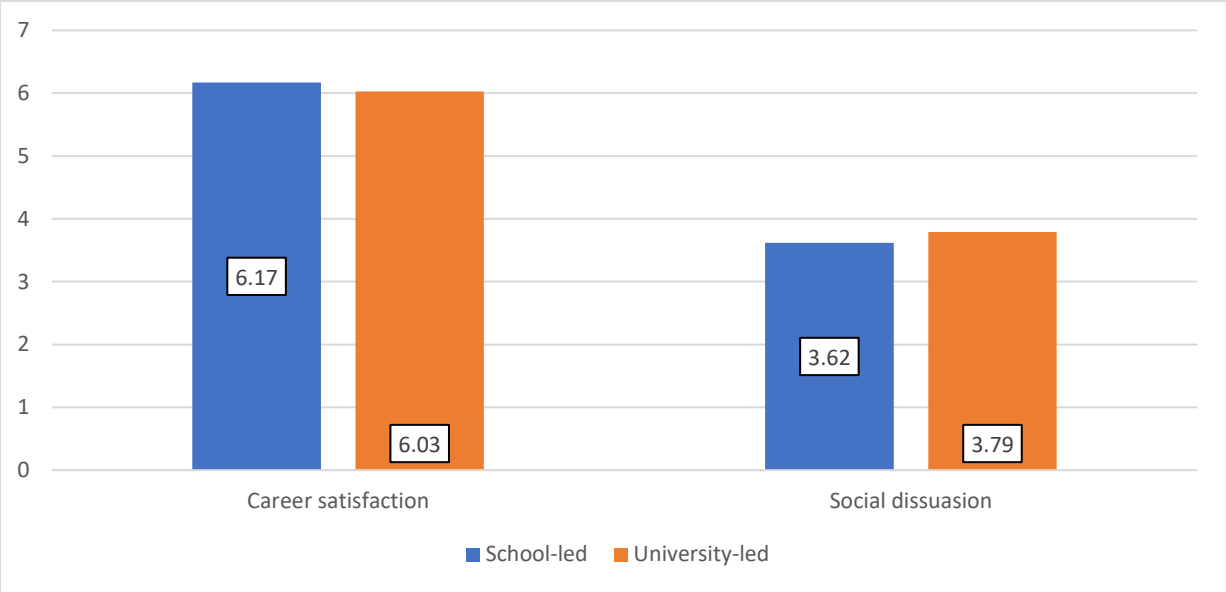


Table 45: Difference in levels of social dissuasion and career satisfaction career satisfaction by choice of route

Factor	Effect size
Social dissuasion	-0.09
Career satisfaction	-0.13

[*The reference group is the 'university-led' group.]*

8.8.5 Summary

In summary, teacher trainees are generally satisfied with their career decision, and experience moderate to low dissuasion about their career choice from their social circle. However, there are some small differences between gender, age group and trainees on different training routes. The younger trainees, for example, reported that they are more

likely to be dissuaded about their career choice by their social circle. Women are more likely to report higher career satisfaction than men, but there is little difference in their perceptions of teachers' pay and status. This may suggest that males are not as satisfied with their career due to extrinsic reasons as they attach greater importance to these factors.

Previous studies found that undergraduates' rate career satisfaction and enjoyment are important in their choice of career (Gorard et al., 2021). The findings from this research suggest that a key factor for trainees choosing teaching is perhaps because they saw teaching as a satisfying career. However, current issues with recruitment suggests that although trainee teachers perceived teaching as a satisfying career, it is not necessarily viewed as such by others. There is also the question of attrition in the profession, suggesting that as time goes on, teachers are less satisfied with their career choice. To find out if trainees' perception of teaching as a satisfying career has changed over time, a follow-up survey was conducted asking the same sample of trainees about their career satisfaction again at the end of the teacher training year. Results of this survey are in Chapter 9.

Chapter 9
CAREER COMMITMENT AND DEVELOPMENT ASPIRATIONS OF TRAINEE TEACHERS IN ENGLAND

9.1 Introduction

This chapter presents findings and discussions related to the third research question of this study. This survey was conducted at the end of their training year to capture changes in perceptions and future intention.

Research question 3: What are the levels of professional commitment and career development aspirations of teacher trainees in England?

(a) How likely are they to stay in teaching?

(b) How satisfied are they with their career choice at the end of their training?

(c) What are their career development aspirations?

9.2 How likely are they to stay in teaching?

When asked specifically about their professional plans in terms of their teaching career, the majority of trainees indicated that they want their whole career to be in the teaching profession (Table 46). A total of 98% expressed the desire to stay at least in the immediate future (short-term). It has to be noted that these are only their intentions to stay in teaching, which may not reflect the reality. The school workforce data (National Statistics, 2022) indicates that only 87.5 % of teachers who qualified in 2020 were still teaching one year later. As time goes on this, the number of those still teaching decreases. Grant and Brantlinger's (2023) review of 24 studies on teacher turnover intentions illustrates that teachers' intended and observed retention are not closely related.

Table 46: Summary of professional plans

Professional plans	Frequency	Percentage (%)
I want my whole career to be in the teaching profession	625	82.1
I want to teach in the short-term but later want to pursue a different career option	117	15.4
I do not want a teaching career	19	2.5

For the small minority who indicated that they did not want a teaching career, three key themes emerged (See Table 47). These themes reflect studies which suggest that issues with retention are often attributed to the relatively poor salary, heavy workload in schools and additional factors such as low status and poor career prospects (e.g., Aldeman, 2015; Dee & Goldhaber, 2017; Sutcher et al., 2019).

The most commonly cited reason for leaving by participants was the high demand of teaching, in particular workload. What is interesting is that trainees at the beginning of their training were aware that teaching was a demanding job, and yet signed up for training. But for a small number of trainees, the heavy workload was perhaps more than they had originally envisaged. Previous studies (Torres, 2016; Lynch et al., 2016) have found that teachers' perceptions of workload are strong predictors of their decision to leave teaching, but reduction in workload alone did not result in lower turnover rates (Cohen, 2005). There has been much research suggesting that it is not the workload per se, but the support available that can make the difference. Teachers who had positive mentoring and professional support in their early years were more likely to stay (Cohen, 2005; DeJong & Campoli, 2018; Latham & Vogt, 2007; Ronfeldt & McQueen, 2017). A number of observational studies have pointed to teachers' perceptions of administrative support and leadership as being strong predictors of teachers' intention to leave (Allensworth et al., 2009; Boyd et al., 2011; Marinell & Coca, 2013). Principal's leadership, school culture and relationships with colleagues have also been suggested as influential in teachers' decision to stay or leave (e.g., Johnson, Kraft & Papay 2012; Sims, 2017).

The comments from participants in this study chime with those of previous work indicating that it is not the heavy workload, but the support available and the school environment that can make or break beginning teachers' will to stay. This has important implications for policy and practice. If we want to keep our teachers, we need to think about how we can support them in their job and provide the kind of environment that makes teaching enjoyable and rewarding.

Table 47: Emerging themes of reasons for not wanting to stay in teaching

Themes	Frequency	Example comments
Demands	8	"…workload very intense" "The hours put into the job affected my mental health" "…unreasonable levels of sacrifice"
School environment	6	"having observed what it was like for other teachers around me I decided that it wasn't for me after all" "I realised the school environment was not for me" "unpleasant placement experience" "the school atmosphere was very painful for me"
Low pay	5	"extremely low pay" "pay is not reflective of the expectations of the role"

For those who decided to stay in the short-term but later wanted to pursue a different career, the heavy workload and the perception that the job is highly demanding is the most often cited reason for wanting to leave (see Table 48). Participants are concerned about whether they would be able to keep up with the heavy workload in the longer-term.

There are also those who wish to pursue a different career but within the sphere of education, such as an educational psychologist, local authority work, lecturing at a university. This group perhaps sees teaching as providing the training necessary for these careers. While this group may be classified as wastage since they do not stay in school teaching, they are not technically lost in the system as their skills and expertise still benefit education in general, albeit not in school classroom. Exploring this further in terms of

school workforce data might be beneficial, and although doesn't solve the attrition issue, would provide a more nuanced picture.

Other reasons given for not wanting in teaching long term includes: wanting to explore other interests, teaching being a convenient career for the current situation (e.g., while children are young and for financial security reasons) and teaching as a fallback option. Williams (2013) observed that young adults often want to explore different possibilities and career options before settling down. This is therefore not reflective of teaching per se, but of the generation.

Table 48: Emerging themes of reasons for wanting to stay in teaching for the short-term

Themes	Frequency	Example comments
Demands of teaching	33	"It's a career that is very demanding and I can't see myself having the same passion and energy for the next 50 years" "I am happy to teach but I cannot see myself doing it for the rest of my career unless the workload is reduced "I think I will burn out!" "I have a heavy workload during the school term and I honestly think that I wouldn't be able to maintain this workload on the long term."
Different career within education	31	"I want to teach for a number of years and then transition to local authority work or policy" "I want to move into research and teaching at a University" "Interested in the field of education more broadly, i.e. leadership and/or policy. I see teaching as an important first step" "I want to become an educational psychologist. Teaching is one very important part of this"
Would like to pursue other interests / professions in the future	10	"Because life is short and there are other professions I wish to have" **"**I don't want to be stuck in the same profession for 30+ years." **"**I believe I'll want to explore different fields"
Suits current circumstances	6	"I plan to teach while my children are at school" "Teaching is a convenient profession which suits my family-orientated goals. Later, I may be able to pursue other interests." ."give[s] me the financial security that I am after at the moment"

Fallback option if needed whilst pursuing other options	5	“Teaching is something that I can come back to but I would like to train in another career to keep my job options open” “The other profession hasn't worked out yet”

For those who wanted to stay in teaching for their whole career, it is the reaffirmation that teaching offers them what they were looking for in their career and what they initially went into teaching for that made them stay (see Table 49). For example, they found teaching enjoyable, teaching allows them to contribute to society, provides opportunity to work with young people and suits their personality and skills.

Table 49: Emerging themes of reasons for wanting to pursue teaching for whole career

Themes	Frequency	Example comments
Innate interest in teaching	185	“It's what I enjoy.” “I like the fact that teaching is never boring” “I absolutely love teaching” “Suits my personality and skill set” “…a profession I have always intended to go in to”
Social contribution	152	“I like that it makes a difference” “…will be helping people” “I want to continue to support children’s development” “…want be apart of developing the next generation.”
Rewarding career	97	“It is a career I find rewarding” “I find it wholly satisfying” “…enjoyable and fulfilling.” “…huge job satisfaction from it.”
Work with children	65	“I enjoy working with young people” “I love working with children” “the energy and challenge of working with children”
Job security	39	“…career with good job security” “…am ready for a more stable career “…sustainable; teaching isn't going anywhere.”
Subject interest	28	“I've been able to continue learning/ teaching a subject I very much care for. “Love for subject area” “…immerse myself in my subject”
Family friendly	13	“…ease of fitting work around future children” “Work patterns suit my family commitments.”

Holidays	11	"…good holidays" "The benefits of being in the profession such as holidays"
Positive teaching and learning experiences	7	"I want to be like the teachers that inspired me as a child. "...having had experience teaching abroad, I loved it"

As the survey took place in the academic year 2019-2020 and the Covid-19 pandemic (and with it, social disruption and school closures) began during their training year, participants were asked whether their career decisions had been impacted by this. The results (Table 50) indicate that the pandemic has affected the career decisions of some trainees.

Table 50: Impact of Covid-19 on professional plans

Professional plans	Yes	Total responses	Percentage (%)
I do not want a teaching career	4	19	21
I want to teach in the short-term but later want to pursue a different career option	21	117	18
I want my whole career to be in the teaching profession	40	635	6

For those who wanted to teach in the short-term, it appears that Covid-19 had changed their plans. For some, it encouraged them to stay in teaching in the short-term because of concerns with job security and the lack of other employment options.

> *"I wasn't going to go into teaching but decided to as I didn't know how stable the job market would be in other sectors"*
>
> *"I am not sure that there is anything better out there at the minute. … This may mean that I have to carry out teaching.*
>
> *"I am staying in teaching as it is more secure for now."*

For others, the pandemic appears to have had a negative impact on their view of teaching as a longer-term career option. Concerns related to the demands of teaching as well as the impact on experience in the classroom:

> *"COVID-19 has made me realise how important having time to yourself is. I'm aware that teaching is a very time-consuming profession, and if I find myself working through the holidays and all weekend I would definitely consider changing career."*

> *"I've realised how little time I was spending with my family and how much I've missed out on by working all weekend, for example"*

> *"It shortened my training so I am still thinking about whether this would be the right career for me long term."*

For those who no longer wanted to pursue teaching, there was no common theme, with decisions appearing to reflect their individual circumstances.

For those who want to teach for the long-term, there were concerns about the impact the pandemic had on their confidence and preparation for teaching:

> *"COVID-19 has only made me feel slightly more nervous about going back into school as I have effectively missed a term of hands-on teaching."*

> *"... feel less prepared for my teaching career than before, so yes, covid-19 has made me feel less certain about my career but it has not overall changed my answer."*

> *Yes because it has somewhat hindered my confidence. However, COVID-19 has not influenced my overall aspiration of teaching long term."*

Some participants expressed that their plans had changed for the short-term, but would still like to be involved in teaching albeit in a slightly different capacity:

"…therefore I don't feel confident enough to apply for a teaching position right away for this Sept, but am instead looking at a support role first for a year."

"I may supply or take a TA position for the time being until I've gained more experience."

This is not unsurprising given the effect Covid-19 had on schools and school closures, which limited both trainee experience in the classroom and also interaction with colleagues and classes around the school. Some trainees might also not have been able to attend school depending on individual circumstances (such as if they were clinically vulnerable) or the school context, including numbers of children educated in school vs online.

Trainees also expressed concerns about short-term recruitment. This is interesting as it may be a reflection of the job market in teaching, which is not what is often portrayed in the media. These comments suggest that there is an oversupply of teachers.

"*There aren't many jobs available and I may need to do supply, which was not what I planned."*

"There are many applicants for jobs at the moment and very few available."

"I have decided to stay on as a Teaching Assistant, as potential vacancies I was interested in have not materialised, most people are staying put."

9.3 How satisfied are they with their career choice at the end of training?

Trainees who completed the survey at the end of the training year indicated high levels of career satisfaction (See Table 51). However, it must be noted that the mean figure is that of the entire Survey 2 sample and therefore cannot be compared to the results of Survey 1. Survey 2 was sent to all providers and therefore includes different participants to Survey 1.

Comparing trainees at the beginning of training and those at the end of training, the results show that career satisfaction remains fairly similar (Table 51). Overall, trainees remained fairly satisfied with their career decisions.

Table 51: Survey 2: Mean ratings for career satisfaction (n =761)

Factor	Mean	Standard Deviation
Satisfaction at the end of training	6.10	1.295
Satisfaction at the beginning of training	6.13	1.087

However, as the respondents in Survey 1 and Survey 2 are not the same, in order to track career satisfaction across both surveys, participants were matched. The matched results show that trainees were slightly less satisfied at the end of the training than at the beginning. The difference is negligible (ES = -0.06). The drop in satisfaction may be the result of the pandemic, but overall career satisfaction is still high (Table 52). The heavy workload and perception of low pay have not had a considerable impact on their career decision, but then the economic situation (as expressed by some respondents) and the consequent uncertainty about job security and job opportunities may explain why career satisfaction remains high. Under buoyant economic situation, the results may not be the same. In research like this, current economic situations may have a part to play and thus need to be considered in the narrative.

Table 52: Career satisfaction: Matched results (n=330)

Survey	Mean	Standard Deviation
Survey 1	6.14	1.041
Survey 2	5.99	1.474

Table 53: Effect size for ratings of career satisfaction

Factor	Effect size
Career satisfaction	-0.06

9.4 What are their career development aspirations?

In general, trainee teachers remained committed to developing themselves as professionals and are highly motivated to be effective teachers (Table 54). They scored highly on planned effort (striving to be an effective teacher) and professional development aspirations. However, they do not particularly aspire to be school leaders. This is perhaps not surprising given that leadership recruitment and retention in schools is often seen as a challenge. The National Association for Head Teachers (2022) data indicates that almost half of middle leaders in both primary and secondary leave within five years.

Table 54: Mean ratings for career development aspirations

Factor	Mean	Standard Deviation
Planned effort	6.55	1.002
Leadership aspirations	4.95	1.727
Professional development aspirations	6.44	1.017

9.5 Summary

In summary, the majority of teachers surveyed said they planned to stay in the profession in the long-term. This is really good news. Workload, school environment and the relatively low pay appear to be key factors putting some off wanting to teach in the long term. These same reasons were also cited by those who indicated that they would only teach for the short-term. For those who want to teach in the long-term, their training experience confirms that teaching is a rewarding and enjoyable career, providing opportunities to work with children and to make a social contribution. They also see teaching as fitting their personality and satisfying their innate interest in teaching.

Covid-19 appears to have had some impact on some trainees' career decisions. For some, it had a negative impact, making them reassess about their priorities, while others the uncertain job market has made them want to stay in teaching. However, for the majority of trainee teachers the pandemic has not affected their career decisions and their career satisfaction remains high.

SECTION D
CONCLUSION

D.1 Overview

This section is the conclusion and is comprised of three sections.

The first summarises the main findings of the research. Each of the research questions are dealt with separately. Some implications and recommendations are discussed within this section, but the final recommendation section presents this.

Next, the limitations of the study are presented. As discussed in B.1, being able to judge research in terms of its quality and trustworthiness is essential, particularly if findings are used to inform policy. Researcher integrity and research transparency in conducting research, and presenting it, is key – and inclusion of the limitations and the impact these have on conclusions drawn and future research is an important aspect of this.

The final section presents recommendations for stakeholders. First recommendations for research are outlined, followed by recommendations for policy and practice.

Chapter 10
CONCLUSIONS AND IMPLICATIONS OF THE FINDINGS

This chapter summarises the key findings of this study and discusses the limitations of the study. Suggestions and implications for further research, and policies and practice are made in light of these findings.

10.1 What are the headline findings of this study?

10.1.1 Who chooses teaching as a career and why?

Evidence from the systematic review of international studies shows that in almost all regions and across all groups (secondary, undergraduate and pre- and in-service teachers), women are more likely to choose teaching as a career than men. They are more likely to report being motivated by intrinsic and altruistic reasons, whereas men are more likely to cite extrinsic reasons, such as pay, job security and job status. Men also tend to see teaching as a not very demanding job, but high in opportunity costs. Women are more likely to experience higher levels of career satisfaction. This may be because they are motivated by factors which are less likely to change. For instance, extrinsic factors are often those which policies or public opinion can influence (e.g., through government policy on pay, or media reporting on the profession).

Men appear to be more strongly influenced by social norms and expectations. Men are therefore least likely to choose to teach primary and early years' because of how society (including family and friends) might view them. For example, some studies have reported that parents can be apprehensive about leaving their young children in the charge of a male teacher (Hansen & Mulholland, 2005; King, 1998; Stroud et al., 2000). Such perceptions are likely to affect decisions of what phase to teach and explain why men are less likely to be found teaching in the early years and primary schools than in the secondary sector.

Reported motivations may differ depending on the group being surveyed. This includes secondary school students who have yet to make their career decision, undergraduates who have made their subject choice at university, pre-service teachers who are training to teach, but may or may not want to teach, and teachers who have made firm decisions (e.g., Faulstich-Wieland, 2013).

For secondary students and undergraduates who have not yet chosen a career path, teaching is one they might be willing to consider, but it is not one that a large proportion identify as a 'first' choice: around half indicated that they would consider it. General career drivers appear to often be intrinsic and extrinsic motivators (job satisfaction, enjoyment, pay, job security, working conditions and promotion prospects (Kyriacou et al, 2002; See, 2004; Gorard et al., 2012). These are factors which are often not considered important for those who want to be teachers. Highlighting such factors which are important to those willing to consider teaching, but have not yet made the decision, would be more likely to capture 'untapped' potential entrants to the profession. It may also explain why teaching is not identified as a strong contender for career options, given the media reporting of salary, workload, stress (all of which are important to those who are important to those not necessarily interested in teaching).

Subject choice at university and university entrance qualifications are key predictors of those who are likely to be teacher or not (Gorard et al., 2021; Savage et al., 2021). Those whose subject choice is more generic with no specific professional affiliations, for example, English, history and physical education undergraduates are more likely to choose teaching compared to those who study archaeology, veterinary science, medicine or dentistry. Those with lower university entrance qualifications are also more likely to choose teaching as a career. Most teaching career choice motivation studies do not include these crucial factors, and this leads to misleading conclusions. Targeting students early, before they have chosen their degree, may also positively impact recruitment.

Those who are interested in teaching, or already teaching, often cite subject interest, innate interest in teaching and ability to teach as a motivating factor. Wanting to work with

children and a desire to make a social contribution or difference are also common reasons given by those who indicated interest in teaching. They are also reportedly less concerned with status, pay, and career prospects. It is not surprising that research on teacher motivation comes to similar conclusions as most research only includes trainee teachers or teachers. Highlighting the social utility value of teaching may work in persuading those already interested in teaching to be teachers but may be less effective in altering the career choice of those who are still unsure about teaching.

Finally, this systematic review, unlike previous reviews, assesses the quality of the research and its trustworthiness. This in itself is important as research on teacher motivation has not been previously rated on the credibility or strength of each individual piece of research conducted. Providing a clear overview on the research conducted so far on this topic, and the weight of each is, in itself, new and important evidence which other researchers can use.

10.1.2 Why do postgraduate teacher trainees in England choose teaching as a career?

The findings from the primary research suggest that the strongest motivating factors are a desire to contribute to society, wanting to work with children and an innate interest in teaching. These findings are consistent with those from the systematic review (RQ1) and are unsurprising given that the survey focused on the motivations of trainee teachers. A positive school experience and job security are other reasons given by trainees for going into teaching. However, most would not admit to choosing teaching as a last resort.

Teacher trainees in England, generally expressed high satisfaction with their choice of career even though they perceive the salary and status of teaching as not commensurate with the demands required of the job. This suggests that trainees are aware that teaching is a challenging profession which is not particularly well-paid or highly respected yet are satisfied with their choice. This is perhaps because, as they have indicated, pay and status are not important factors in their career decision. They want to be teachers for other more intrinsic and altruistic reasons.

Most previous studies which look at the motivations of trainee teachers do not look at the motivations of individuals on different training routes, or the difference between first career teachers and those who have had other previous careers. Even fewer actually looked at the long-term career choice and commitment of trainee teachers. This thesis make a significant contribution to the literature as it compared the motivations and career perceptions of subgroups of trainees.

The results suggest that women tend to say that they are motivated by their desire to work with children (ES = +0.56) than men. First-career teachers were also more likely to choose teaching for this reason. Men, on the other hand, are more likely to cite job transferability as a reason for going into teaching. This has implications for recruitment policies. Focusing on this motivation may be more likely to attract men into teaching.

In contrast to the findings from the systematic review, the survey found that men are not more likely than women to be persuaded by social norms and families to go into teaching or not.

Women and younger graduates are also more likely to indicate having a positive school experience as a driver to pursue teaching. Therefore, policies to attract individuals to teach may need to think about how school experiences can be made enjoyable for students. Office for National Statistics (2021) findings illustrate the impact teachers have on children's happiness and perceptions of schools. Strategies therefore to encourage a positive student-teacher relationship and a supportive school climate could be considered.

Trainees on university-led routes are more likely to be attracted by the perception that teaching is a career which offers flexibility of job location (ES = +0.40), enhancing where they can work across the world. This may be a consequence of some of the differences between the training routes: not all school-led route, for example, offer the internationally recognised PGCE.

The perception of teaching as a family friendly profession is more appealing to women than men (ES = +0.27). This reflects the view of the wider society that women are still regarded as the primary child carer. Whether this perception of teaching deters men may need to be considered as it further feeds the view that teaching is a feminized profession.

On the whole, trainee teachers in England at the start of their training were very satisfied with their choice of career. However, women were more likely than men to report being satisfied with their choice of career (ES = +0.25).

10.1.3 How committed and satisfied are trainees in England with their career decisions?

Almost all the trainees who participated in this study want to continue to teach, at least in the short term. While trainees were generally satisfied with their choice of teaching as a career, and remained so at the end of training, there was a slight drop in satisfaction levels at the end. Very few studies have looked at how levels of career satisfaction change across the teaching year, and none in England. This is new research. One of the reasons for this decline may be the pandemic, but trainees raised workload as a concern as well.

The Covid-19 pandemic led to disruptions not only in terms of reducing the time spent in school due to school closures, but also changes in the delivery of provider-led teacher training. Providers had to move training online at short notice, given the work from home mandate. The ITT market review (DfE, 2021) indicates the importance of the training curriculum being translated into structured and sequenced practice environments, which school closures would have made a significant difference to. This may account for why career satisfaction reduced, particularly as time in school was noted by trainees as a negative consequence of the pandemic which had an impact on their levels of confidence.

The survey also examined whether the pandemic had an impact on trainees' career decisions at the end of their training year. The pandemic brought unprecedented challenges across the world and the impact this had on teacher training was not well researched. This provided a unique opportunity to study the impact of the pandemic on teachers' career decisions. The study found that school closures had a small effect on

the career decisions of a small group of trainees, although the effect is not consistent. For some, it appeared to reaffirm their decision to stay in teaching, while for others, it had made them rethink their priorities. The job market appeared as a theme for deciding to stay in teaching for the short-term.

For those who did not want to continue teaching, unsurprisingly, the demands of the job were decisive. This has long been flagged as an issue in retention of staff in schools. Although policies have been put in place to reduce workload and the demands of the profession, this needs to be a continued priority.

Trainee teachers in the study are generally committed to developing themselves as professionals, but few would consider a leadership role at this stage. This is concerning as there is an issue recruiting leadership roles within the current workforce. If new trainee teachers are already not interested in pursuing a leadership position in schools, the leadership recruitment challenges are set to continue. Policies could look to support trainee teachers develop leadership skills during their training to not only prepare them for future positions, but encourage them to consider their future professional plans to include leadership.

10.3 Limitations of the study

No research is without limitations, and this thesis is no exception. It is essential to acknowledge these limitations so readers can judge for themselves the strength of the evidence of this research and its findings.

As there are essentially two parts to this thesis, I will first focus on the limitations of the systematic review and then the primary research.

10.3.1 Limitations of the systematic review

As with all systematic reviews of this scale, it is likely that some studies will be missed, but the key thing is whether including these studies will have altered the finding. I am confident that the scale of the search and the number of databases included in the search

mean that the systematic review is as comprehensive as it can be. The strength of the systematic review is that each included study is quality appraised using a tool that judges the strength of the evidence so that the findings are based on the most robust studies. Although other reviews have claimed to also critically appraise the included studies, it has to be mentioned that most of these tools do not assess the quality of evidence. Most of these tools assess the quality of reporting, rather than the quality of evidence.

While the conduct of the systematic review is robust, the majority of the studies included in the review are not. A high proportion of the research on motivations, perceptions and career satisfaction employ the FIT-Choice questionnaire. Research using the FIT-Choice model often asks potential teachers or teachers what motivates them. An issue with surveying only those who are training to teach or who are in teaching is the problem of recall or post-hoc justification for decisions rather than their original motives. Initial motives and post-hoc recollections can be different because of the possibility of the effects of socialisation and a rationalisation of teachers' own decision (Henoch et al., 2015). Some suggest that student teachers' recollection of why they chose to teach, and their perceived competencies, might be romanticised (Bohndick et al., 2017; Festinger, 1957).

Although there is a clear rationale for exploring what motivates those who choose teaching, it is essential that research also looks to understand the views of those who are considering teaching, or who have chosen not to teach. This provides a more thorough and complete account of choice of teaching as a career option. The review found a large number of research that focuses on only those who have chosen to teach (trainee teachers or teachers).

There is also the issue with the quality of research design in many studies in the review. Most are based on students in one institution with non-randomised samples, yet use analyses such as Chi-square, ANOVA, and report only t-test results, p-value and confidence intervals. Such analyses are not appropriate as the samples are not random and as such can lead to misleading conclusions. It is also not uncommon for studies to

interpret the factor loadings in factor analysis (FA) as the overall mean scores for the factor. These studies tend to use FA to determine the most influential motivators—confusing the factor loadings as determinants. In studies regarding motivation to teach, the top loadings only suggest that these factors are common among those who chose teaching; it does not tell us that these are the principal factors that determine why people choose teaching.

Almost all the studies identified intrinsic, altruistic and extrinsic motivations as key factors influencing individuals' choice of teaching as a career. This is not surprising as these studies use the same FIT-choice Likert-scale self-report questionnaire, which broadly classifies these motivating factors into three categories: intrinsic (personal utility), altruistic (social utility) and extrinsic. This is a limitation of the FIT-Choice instrument. Few studies included other potential exogenous factors, such as background characteristics, or used regression analysis to determine key influencing factors, thus missing out on key influencing factors. For example, not all studies include gender in the analysis (e.g., Tusin, 1991). Although some considered socio-economic backgrounds and other endogenous variables, many did not. Studies that also conduct additional regression analysis controlling for background variables have come to quite different conclusions.

It is very common of research on teachers' career choice motivation to rely only on frequency counts and average the scores of categorical variables. These variables are usually ordinal from Strongly Disagree, Disagree to Agree and Strongly Agree, but are often treated as real numbers with the mean scores used to represent the level of agreement among respondents. Ordinal scales are not real numbers as the intervals along the points in the scale are not equal (Gorard, 2021). The change in perception or motivation between Strongly Disagree and Disagree is not the same as the change from Disagree to Unsure or Agree. Therefore, the mean scores are meaningless.

There is also the issue of inconsistency in how factors are classified. This can be problematic as Giersch (2021) has demonstrated that while all the three motivations (intrinsic, extrinsic and altruistic) influenced students' decision to choose teaching, results

may differ between studies depending on how these concepts were operationalised and measured. Problems also arise in how these factors are understood in different cultures. Indeed, participants might not often see the distinction (e.g., Lai et al., 2005).

It is also important to note that responses can vary depending on whether respondents were trainee teachers, in-service teachers, students in school or undergraduates who are making decisions. For example, in the early study by Lortie (1975), family friendly hours were reported as factor for in-service teachers' choosing to go into teaching, whereas this was not a factor of consideration at all among trainee teachers in later studies. Answers also differ depending on the year of study at undergraduate degree or postgraduate degree. Depending on when the survey was carried out, answers may also differ. Fokkens-Bruinsma and Canrinus (2012a) found that pre-service teachers at the end of the training tended to rate social influences and ability as key motivating factors compared to those at the beginning of their training.

10.3.2 Limitations of the primary research

Recruiting and sampling strategy

The primary limitation of the primary research is the size of the sample. The number of respondents in this study represents only 5% of the total initial teacher training population. The findings should be taken to relate to the sample, although the conclusions could have some wider relevance when used with caution.

Nevertheless, it is the largest survey of postgraduate teacher trainees in England across providers. And when compared to the accessible population, the data collected did result favorably when compared to research published on similar topics. Although the study cannot claim to be representative of full-time postgraduate trainees in England, few studies can make the claim.

Wang et al.'s (2020) study interviewed only 27 PGCE students (14 primary and 13 secondary) at one Scottish university. Manuel & Brindley's (2005) study on pre-service

teachers' motivations, involved a questionnaire survey of 22 students undertaking a PGCE at Cambridge University, followed by interviews. However, it was not made clear how the students were chosen and how many of the 22 surveyed participated in the interviews. Although Reid and Caudwell's (1997) study of secondary PGCE students was larger, involving a questionnaire survey of 453 PGCE secondary students across five universities and semi-structured interviews with 28 volunteers, it is unclear whether the survey participants included all relevant students in the five universities or whether they were stratified or randomly sampled. There was also no mention of response rate. As the examples illustrate, many studies are not able to claim to be representative of the whole population studied.

This study surveyed only those who have already chosen teaching were surveyed. This is a potential weakness of the study as initial motives and post-hoc recollections can be quite different because of the possibility of the effects of socialisation and post hoc rationalisation. The study could have been extended to include individuals who had not chosen to teach. However, this research is unique in that it compared the views of trainees at the beginning and the end of their training to see how their career decisions and level of satisfaction with their choice have changed and also determine the level of commitment to the profession.

In order to follow-up on trainees and their responses in the initial training phase with their responses in the end of training phase, the two surveys had to be matched. This proved to be a challenge. Although 492 indicated in Survey 2 that they had completed Survey 1, only 330 could be successfully matched. This represented a loss of data which could potentially affect the results.

Limitations of survey questionnaires

Another limitation is the use of the FIT-choice career instrument, which was used for the first survey. These limitations have been discussed in the previous section. The decision to use this instrument was based on the fact that it was the most widely used instrument deemed to be a robust scale in research on this topic. It had also been tried and validated

across many countries. It was only when I had started the systematic review and analysed my primary data that issues with this instrument surfaced.

Also, I used the full version of the instrument as it had not been used or tested in the English context, and because I thought it would maintain the integrity of the instrument. My experience from this research suggests that this was perhaps not a good decision as a large number of items were repeated several times, but phrased in different ways. The questionnaires became overly long which may have unintended consequences, such as questionnaire fatigue, when respondents become bored with the questionnaire which can lead to frustration and answering questions without much thought. It could result in low participant engagement. Respondents therefore might skip questions or become tired of answering questions, leading to missing data or unreliable responses.

Finally, the FIT Choice-Scale did not include “interest in the subject matter” as a possible motivating factor. This has emerged as an important motivation in a number of studies (Heinz et al., 2017; Nesje, Brandmo & Berger, 2017; Berger et al. 2017; Watt, Richardson and Morris, 2017). The survey findings are, therefore, confined only to those factors in the questionnaire.

10.4 Recommendations

10.4.1 Recommendations for research

There are a number of recommendations for future research as a result of this thesis. These are a result of both the systematic review and the primary research.

The systematic review made clear that much of the research which looks at motivations and perceptions of the teaching profession is generally weak. This is due to a number of factors, including context, instruments and methods used, how data were analysed and how this is communicated and presented. Research has previously highlighted concerns with the type and quality of educational research published (e.g., Gorard, Rushforth & Taylor, 2004; See et al., 2020). This review also demonstrates that more research which

focuses on quality is needed in order to support understanding of why people choose teaching, particularly underrepresented groups.

The majority of studies only survey trainee teachers. These studies assume that those in teacher training intend to teach. This is not always the case. The studies also do not provide a complete picture of what may or may not attract individuals to teach as those who are considering teaching, or have chosen not to teach, are not represented. Understanding the barriers to teach is necessary to improve teacher supply. Future research should seek to widen the sample to consider career motivations of those who are considering teaching, or those who have considered it but decided not to pursue teaching. This would support policy initiatives to target this untapped group. Otherwise, policies continue to appeal to the already converted.

Although the primary research of this thesis surveyed trainee teachers, it considered other factors (gender, career choice, age and training route) in the analysis. Many studies do not do this, solely presenting the findings of those who are training to teach. This is a limitation of other research, and where this study stands apart. Further research should look to consider other factors which may be influential in career decision making, rather than repeating research which does not further develop the current knowledge of why people choose to teach. Studies which have taken other factors (e.g., demographic background factors) into account suggest that these are key determining factors. Excluding these factors, will therefore, lead to partial and even inaccurate conclusions.

10.4.2 Recommendations for policy and practice

The findings from the stronger studies in the systematic review suggest that students' decisions to teach or not are largely decided by the time they have begun their university degree. Choice of subject, entry qualifications, predicted degree classification and parental education and occupation are strong determinants of who are likely to be

teachers or not. This has implications for policy. Targeting students early, before they have made their degree choice at university, may support recruitment.

The findings from this study also indicate that positive school experiences are important, and thus, consideration of how to support this would be prudent. This may include strategies to encourage strong student-teacher relationships and support school environments (Sims, 2013; Boyd et al., 2011; Johnson, Kraft & Papay, 2012). Schools also need to further understand the role they play, not only in terms of pupils' academic success, but also their perceptions of the profession and the impact this has on future teacher recruitment. In addition to working to improve positive school experiences for students for long-term recruitment aims, initiatives to increase applications to teacher training could seek to appeal to this, reminding individuals of their school experience. Of course, this is likely only to have an impact on those who have had positive school experiences, but research indicates that this is a driver to teach.

Increasing the diversity of the teaching workforce and reaching 'harder to recruit' individuals is a clear aim of many governments, including in the UK. Recruitment efforts should look to emphasise differing motivations. Highlighting extrinsic motivations, such as salary, job security, working condition, promotion prospects, would be more likely to attract men and STEM subjects graduates.

Equally, the primary research found that there are differences in the motivations of other groups, including those which have not previously been considered in other research. For example, initiatives which look to recruit career switchers or those who want to train via a school-led route should seek to promote factors are more important to them. Different recruitment drives should be intentional in what, and how, they attract potential teachers.

For those who are already teaching, demands of the job are a retention challenge. This is not a new finding as it has been a recurrent theme in recent years, nonetheless it is important as it shows that there is still work to be done. Demands of teaching were highlighted by trainees as the most influential reason for wanting to leave the profession

and only teach in the short-term. This suggests that although there are policies in place to reduce the demands of the job (e.g., Early Career Framework, Workload Reduction Strategy), it is not having the desired impact. How to reduce the “heavy workload” and “levels of sacrifice” required needs to be prioritised in recruitment and retention strategies. Increased recruitment, without improving retention, is only a short-term plaster for issues with teacher supply. The validity and relevance of the accountability culture, associated with Ofsted inspections and league tables (e.g., Progress 8) have to be re-examined.

Although the Covid-19 pandemic was unprecedented, learning from findings related to this can be applied. The importance of being prepared to teach and confidence in their ability was negatively impacted by the pandemic – and impacted both long-term retention of trainees and their initial career plans. Responses demonstrated the necessity of practical application of learning in the classroom. This has implications for initial teacher training, as well as early career professional development. A priority for training needs to be supporting trainees to put learning into practice, with expert guidance. This could include both in the classroom and through practice with colleagues and peers (in person or online), when classroom practice may not be possible (such as school closures due to a pandemic, strikes or other perhaps unforeseen circumstances). Training in the use of edtech and online teaching to prepare teachers could be introduced to the ITT curriculum, as See, Wardle and Collie (2020) found that much of the negative wellbeing during the pandemic was due to teachers lack of preparation and training in the use of edtech. The findings also reinforce the centrality of the role of the provider and the mentor in ensuring trainees are confident in their teaching abilities and feel prepared to teach. Ensuring the curriculum is strong and carefully sequenced is essential, as is training mentors for the important role they play in school.

Preparedness to teach also extends to early career teachers. If this has an impact on trainees’ decisions about career commitment at the end of their training year, it stands to reason that this will be the case for their early career as well. This will also be true of the findings relating to demands of the profession. Early support systems for new teachers,

such as induction and mentoring, therefore become ever more important. Although there have been changes to early career support for trainee teachers, including the introduction of the Early Career Framework based training programme, there have been challenges (DfE, 2023b) which need to be re-examined given the implications of lack of confidence, preparedness and workload for those starting their teaching career. Policies to address school workload also needs further thought and attention, particularly those relating to aspects which are common sources of stress: marking and lesson preparation. Collaborative work among teachers, sharing of teaching resources, and more creative marking policies which support to reduce workload, but also still support pupil learning, could be implemented.

Lack of teachers wanting to pursue leadership in school has, again, been a recurrent issue in the profession. The primary research indicated that even teachers at the start of their teaching career are, on the whole, not considering leadership roles. This is a concern for the profession but also for the education system as a whole. A strong and quality education system relies both on leaders and teachers. Exploration of whether teachers' plans at the end of their training are reflective of the reality is needed.

It is also important that policies consider how teachers can be best supported to see leadership positions as something they aspire to. But this requires an understanding of why trainees are not interested in leadership roles. Given the pressing concerns trainees have about the demands of teaching and workload, it may be that this is putting new teachers off from wanting to lead. Initiatives to develop trainee teachers, and early career teachers, leadership skills and make new teachers more aware of progression and roles in school could help to reduce lack of interest in an already strained area of recruitment. It would also be productive to explore the extent to which motivations and attitudes towards teaching at the beginning of their training influence or sustain their decisions to stay in teaching.

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Appendices

Appendix 1: All studies (rated 0*-5*)

Studies discussed (rated 3* or 2*)	
References	**Star rating**
Abotsi et al. (2020)	2*
Adkintomide and Oluwatosin (2011)	2*
Allen (2000)	2*
Argentin (2013)	2*
Bakar et al. (2014	2*
Bergey and Ranellucci (2021)	3*
Christensen (2021)	3*
Christensen et al. (2019)	2*
Cornali (2019)	2*
Dickson (2013)	2*
Elfers et al. (2008)	3*
Fokkens-Bruinsma and Canrinus (2012b)	2*
Garra-Alloush et al. (2021)	2*
Giersch (2016)	3*
Giersch (2021)	2*
Glutsch and König (2019)	2*
Gorard et al. (2021)	3*
Gratacós et al. (2017)	2*
Harms and Knobloch (2005)	2*
Han and Rossmiller (2004)	3*
Heinz (2015)	2*
Heinz et al. (2017)	3*
Hogan et al. (2017)	2*
Howes and Goodman-Delahunty (2015)	2*
Htang (2019)	2*
Hunter (1998)	2*
Ivanec (2020)	2*
James and Choppin (1977)	2*
Johnston et al. (1999a)	2*

Judge (2004)	2*
Keck Frei et al. (2017)	2*
Kılınç et al. (2012)	2*
Klassen et al. (2022)	2*
Kyriacou and Benmansour (2002)	2*
Kyriacou et al. (2002)	3*
Lai et al. (2005)	3*
Lee et al. (2019)	2*
Lin et al. (2012)	2*
Lohbeck and Frenzel (2021)	2*
Mangieri and Kemper (1984)	3*
Moran et al. (2001)	2*
Moreau (2015)	2*
Moses et al. (2019)	2*
Nano et al. (2019)	2*
Öztürk-Akar (2020)	2*
Ponnock et al. (2018)	2*
Schaffner and Jepsen (1999)	2*
Sclan (1993)	2*
See (2004)	3*
Tusin and Pascarella (1985)	2*
Tusin (1991)	2*
Wagner and Imanel-Noy (2014)	2*
Watt and Richardson (2007)	2*
Watt and Richardson (2008)	2*
Watt et al. (2012)	2*
Whannell and Allen (2014)	2*
Williams and Forgasz (2009)	2*
Wolf et al. (2021)	2*
Wong (1994)	2*
Wood (2001))	2*
Ye et al. (2021)	2*
Yong (1995)	2*
Yu (2011)	2*
Yüce et al. (2013)	2*
Zounhia et al. (2006)	2*

Studies not discussed (rated 1* and below)	
References	**Star rating**
Abulon (2012)	1*
Afrianto (2014)	1*
Akar (2012)	1*
Akpochafo (2020a)	1*
Akpochafo (2020b)	1*
Aksoy (2017)	1*
Yaseen (2018)	1*
Albulescu and Albulescu (2015)	1*
Amani (2013)	1*
Anthony and Ord (2008)	1*
Archibong et al. (2009)	1*
Azman (2013)	1*
Balyer and Özcan (2014)	1*
Bastick (2000)	0*
Bergey et al. (2019)	0*
Bergmark et al. (2018)	1*
Beyon et al. (1992)	1*
Bohndick et al. (2017)	1*
Brown (1992)	1*
Brown and Butty (1999)	1*
Butt et al. (2010)	1*
Carrington (2002)	1*
Celik (2020)	1*
Chan (2005)	1*
Choi and Song (2014)	1*
Choi and Song (2015)	1*
Chong and Goh (2007)	1*
Chuan (2013)	1*
Chung and Huang (2012)	0*
Cushman (2000)	1*
Daniel and Ferrell (1991)	1*
Davies and Hughes (2018)	1*
De Corse and Vogtle (1997)	0*

De Hernandez (2020)	0*
Dibapile (2005)	0*
Dieterich and Panton (1996)	1*
Dos Santos (2019)	0*
Drahmann et al. (2019)	1*
Du Preez (2018)	1*
Dündar (2014	1*
Eren and Tezel (2010)	0*
Eren (2012)	1*
Espinet et al. (1992)	1*
Evans (2011)	0*
Friedman (2016 0)	1*
Gao and Trent (2009)	0*
Goh and Lourdusamy (2001)	1*
Goller et al. (2019)	1*
Gordon (1993a)	0*
Gordon (1993b)	1*
Gordon (2000)	1*
Gore et al. (2015)	1*
Graham and Erwin (2011)	0*
Heinz (2013)	1*
Hennessy and Lynch (2017)	1*
Hillier et al. (2013)	1*
Howard (2009)	0*
Hudson (2017)	1*
Ibarahim (2015)	1*
Jeong (2016)	1*
Jones et al. (1999)	0*
Kass and Miller (2018	0*
Keane and Heinz (2015)	1*
Khoh et al. (2005)	1*
Kılınç and Seymen (2014)	1*
Kiziltepe (2015)	1*
Klassen et al. (2011)	1*
Koch and Farquhar (2015)	0*
König and Rothland (2012)	1*
Kwok et al. (2022)	1*

Kyriacou and Coulthard (2000)	1*
Low et al. (2017)	0*
Mack and Jackson (1993	1*
Mack (1996)	1*
Mack et al. (2003	1*
MacKenzie (2013)	1*
Mangaoil et al. (2017	0*
Manuel and Hughes (2006	1*
Maree et al. (2009)	1*
Markovits and Kartal (2013)	0*
Massari (2014	1*
McDonald (2017)	0*
Meidl (2019)	0*
Milanowski (2002)	1*
Miller and Endo (2005)	1*
Morales (1994)	1*
Moss (2020)	1*
Mudzielwana (2015)	1*
Mulholland and Hansen (2003)	1*
Mwamwenda (2010)	1*
Newby et al. (1995)	0*
Nolan and Rouse (2013)	1*
O'Sullivan et al. (2009)	1*
Organisation for Economic Cooperation and Development (OECD) (2018)	1*
Osguthorpe and Sanger (2013)	1*
Padhy et al. (2015)	1*
Park (2006)	1*
Petersen and Petker (2011)	1*
Pietrzak et al. (2011)	1*
Place et al. (1996)	1*
Pop and Turner (2009)	1*
Reid and Caudwell (1997)	1*
Richardson and Watt (2005)	1*
Richardson and Watt (2006)	1*
Saban (2003)	1*
Sahin (2014)	1*
Salifu et al. (2018)	1*

Sanatullova-Allison (2010)	1*
Serow (1993)	1*
Sharif et al. (2016)	1*
Shindler (1998)	1*
Shih (2016)	0*
Shipp (1999)	1*
Sibanda (2015)	1*
Sinclair (2008)	1*
Smith (2019)	1*
Smith and Pantana (2010)	1*
Smith et al. (2004)	1*
Stellmacher et al. (2020)	1*
Stroud et al. (2000)	1*
Sumison (2000)	1*
Suryani et al. (2013)	1*
Suryani (2014)	1*
Swope-Marrs (1998	1*
Tašner et al. (2017)	1*
Tillmann et al. (2020)	1*
Thomson et al. (2012)	1*
Thomson (2013)	1*
Thuranira (2010)	1*
Tomšik (2016)	1*
Tomšik (2015)	1*
Topkaya and Uztosun (2012)	1*
Towse et al. (2002)	1*
Tustiawati (2017)	1*
Waller (2010)	1*
Wang and Fwu (2002)	1*
Wang (2004)	1*
Wang (2019)	1*
Watson (2012	1*
Watt et al. (2013)	1*
Webb and Hodge (2003)	1*
Weiner (1993)	1*
Wilder (1999)	1*
Wong et al. (2014)	1*

Yates-Menifee (1992)	1*
Zhang et al. (2019)	1*

Appendix 2: Excluded studies

References	Reasons
Alsheha (1988)	Excluded on date
Bradley (1983)	Excluded on date
Brown-West (1991)	Not available
Carpenter and Foster (1979)	Excluded on date
DeLong (1987)	Excluded on date
Farrell (1980)	Excluded on date
Farrugia (1986)	Excluded on date
Ferrell and Daniel (1993)	Excluded on topic
Forell (1981)	Excluded on date
Fox (1961)	Excluded on date
Frazier et al. (2019)	Excluded on topic
Frusher and Newton (1987)	Excluded on date
Guba et al. (1959)	Excluded on topic
Hardy (1970)	Excluded on date
Harris and Azwell (1992)	Excluded on topic
Henry (2017)	Excluded on date
Jenkins (1987)	Excluded on topic
Kemper and Mangieri (1985)	Excluded on date
Kim and Yang (2017)	Excluded on topic
Kimiti and Maria (2012)	Excluded on topic
Klausmeier et al. (1951)	Excluded on date
Kyriacou et al. (2003)	Excluded on topic
Lee and Yuan (2014)	Excluded on evidence
Levin (1985)	Excluded on date
Mack and Jackson (1990) Not available	Not available
Mutalib et al. (n.d.)	Excluded on topic
Mvungi (2009)	Excluded on evidence
Myers (1966)	Excluded on date
Nelsen and Giebink (1968)	Excluded on date
Nwagwu (1976)	Excluded on date
Olamide and Olawaiye (2013)	Excluded on topic
Olaseboye Olasehinde (1972)	Excluded on date
Page (1980)	Excluded on date

Palmer (1985)	Excluded on date
Purves et al. (2005)	Excluded on topic
Raby (1970)	Excluded on date
Richardson et al. (2007)	Excluded on evidence
Richardson and Watt (2014)	Excluded on evidence
Richardson and Watt (2016)	Excluded on evidence
Roberson et al. (1983)	Excluded on date
Schwarzweller and Lyson (1978)	Excluded on date
Shaw (1996)	Excluded on target group
Soh (1989)	Excluded on date
Stewart (1956)	Excluded on date
Strickland et al. (1987)	Excluded on date
Tabassum and Rahman (2014)	Excluded on topic
Tarawneh (1988)	Excluded on date
Tincher and Brogdon (1986)	Excluded on date
Watt and Richardson (2004)	Excluded on topic
Watt et al. (2017)	Excluded on evidence
Yurchak (1973)	Excluded on date

Appendix 3: Survey 1: Participant information sheet

Project title: Who wants to be a teacher and why?

Researcher(s): Sarah Ross
Department: Education
Contact details: sarah.a.ross@durham.ac.uk

Supervisor name: Stephanie Lichtenfeld
Supervisor contact details: stephanie.lichtenfeld@durham.ac.uk

Supervisor name: Helen Cramman
Supervisor contact details: helen.cramman@durham.ac.uk

You are invited to take part in a study that I am conducting as part of my EdD at Durham University.

This study has received ethical approval from the School of Education ethics committee of Durham University.

Before you decide whether to agree to take part it is important for you to understand the purpose of the research and what is involved as a participant. Please read the following information carefully. Please get in contact if there is anything that is not clear or if you would like more information.

The rights and responsibilities of anyone taking part in Durham University research are set out in our 'Participants Charter':
https://www.dur.ac.uk/research.innovation/governance/ethics/considerations/people/charter/

What is the purpose of the study?
The aim of this study is to…

- Investigate who chooses teaching and why, across different training routes. It also aims to investigate whether different 'teacher types' can be established based on the data collected.
- Timescale: 2 years

Why have I been invited to take part?
You have been invited because

- You are a trainee teacher undertaking a full-time, one-year postgraduate initial teacher training course.

Do I have to take part?
Your participation is voluntary and you do not have to agree to take part. If you do agree to take part, you can withdraw at any time, without giving a reason. Your rights in relation to withdrawing any data that is identifiable to you are explained in the accompanying Privacy Notice.

What will happen to me if I take part?
If you agree to take part in the study, you will…

- Be asked to complete an online survey at the beginning of your course and a second online survey at the end of your course. Each survey should not take longer than 20 minutes to complete.
- When completing the survey you can omit any questions you do not wish to answer.
- You will be asked whether you give consent to be contacted at a later date for an interview.

Are there any potential risks involved?

- There is no expected benefit to the participant other than contributing to the research on initial teacher training.
- No risks or discomforts have been identified.

Will my data be kept confidential?

All information obtained during the study will be kept confidential. If the data is published it will be anonymous and will not be identifiable as yours.

Full details are included in the accompanying Privacy Notice.

What will happen to the results of the project?

- The results will be published and the thesis is expected to be deposited in Durham e-theses: Durham University is committed to sharing the results of its world-class research for public benefit. As part of this commitment the University has established an online repository for all Durham University Higher Degree theses which provides access to the full text of freely available theses. The study in which you are invited to participate will be written up as a thesis. On successful submission of the thesis, it will be deposited both in print and online in the University archives, to facilitate its use in future research. The thesis will be published open access.
- No personal data will be shared, however anonymised (i.e. not identifiable) data may be used in publications, reports, presentations, web pages and other research outputs. At the end of the project, anonymised data may be archived and shared with others for legitimate research purposes.
- All research data and records needed to validate the research findings will be stored for 10 years after the end of the project.

Who do I contact if I have any questions or concerns about this study?

If you have any further questions or concerns about this study, please speak to the researcher or their supervisor. If you remain unhappy or wish to make a formal complaint, please submit a complaint via the University's Complaints Process.

Thank you for reading this information and considering taking part in this study.

Appendix 4: Privacy notice

Privacy Notice

PART 1 – GENERIC PRIVACY NOTICE

Durham University has a responsibility under data protection legislation to provide individuals with information about how we process their personal data. We do this in a number of ways, one of which is the publication of privacy notices. Organisations variously call them a privacy statement, a fair processing notice or a privacy policy.

To ensure that we process your personal data fairly and lawfully we are required to inform you:

- Why we collect your data
- How it will be used
- Who it will be shared with

We will also explain what rights you have to control how we use your information and how to inform us about your wishes. Durham University will make the Privacy Notice available via the website and at the point we request personal data.

Our privacy notices comprise two parts – a generic part (ie common to all of our privacy notices) and a part tailored to the specific processing activity being undertaken.

Data Controller
The Data Controller is Durham University. If you would like more information about how the University uses your personal data, please see the University's Information Governance webpages or contact Information Governance Unit:
Telephone: (0191 33) 46246 or 46103
E-mail: information.governance@durham.ac.uk

Information Governance Unit also coordinate response to individuals asserting their rights under the legislation. Please contact the Unit in the first instance.

Data Protection Officer
The Data Protection Officer is responsible for advising the University on compliance with Data Protection legislation and monitoring its performance against it. If you have any concerns regarding the way in which the University is processing your personal data, please contact the Data Protection Officer:

Jennifer Sewel
University Secretary
Telephone: (0191 33) 46144
E-mail: university.secretary@durham.ac.uk

Your rights in relation to your personal data

Privacy notices and/or consent

You have the right to be provided with information about how and why we process your personal data. Where you have the choice to determine how your personal data will be used, we will ask you for consent. Where you do not have a choice (for example, where we have a legal obligation to process the personal data), we will provide you with a privacy notice. A privacy notice is a verbal or written statement that explains how we use personal data.

Whenever you give your consent for the processing of your personal data, you receive the right to withdraw that consent at any time. Where withdrawal of consent will have an impact on the services we are able to provide, this will be explained to you, so that you can determine whether it is the right decision for you.

Accessing your personal data
You have the right to be told whether we are processing your personal data and, if so, to be given a copy of it. This is known as the right of subject access. You can find out more about this right on the University's Subject Access Requests webpage.

Right to rectification
If you believe that personal data we hold about you is inaccurate, please contact us and we will investigate. You can also request that we complete any incomplete data.

Once we have determined what we are going to do, we will contact you to let you know.

Right to erasure
You can ask us to erase your personal data in any of the following circumstances:

- We no longer need the personal data for the purpose it was originally collected
- You withdraw your consent and there is no other legal basis for the processing
- You object to the processing and there are no overriding legitimate grounds for the processing
- The personal data have been unlawfully processed
- The personal data have to be erased for compliance with a legal obligation
- The personal data have been collected in relation to the offer of information society services (information society services are online services such as banking or social media sites).

Once we have determined whether we will erase the personal data, we will contact you to let you know.

Right to restriction of processing
You can ask us to restrict the processing of your personal data in the following circumstances:

- You believe that the data is inaccurate and you want us to restrict processing until we determine whether it is indeed inaccurate
- The processing is unlawful and you want us to restrict processing rather than erase it
- We no longer need the data for the purpose we originally collected it but you need it in order to establish, exercise or defend a legal claim and
- You have objected to the processing and you want us to restrict processing until we determine whether our legitimate interests in processing the data override your objection.

Once we have determined how we propose to restrict processing of the data, we will contact you to discuss and, where possible, agree this with you.

Retention
The University keeps personal data for as long as it is needed for the purpose for which it was originally collected. Most of these time periods are set out in the University Records Retention Schedule.

Making a complaint

If you are unsatisfied with the way in which we process your personal data, we ask that you let us know so that we can try and put things right. If we are not able to resolve issues to your satisfaction, you can refer the matter to the Information Commissioner's Office (ICO). The ICO can be contacted at:

Information Commissioner's Office Wycliffe House Water Lane Wilmslow Cheshire SK9 5AF
Telephone: 0303 123 1113
Website: Information Commissioner's Office

PART 2 – TAILORED PRIVACY NOTICE

This section of the Privacy Notice provides you with the privacy information that you need to know before you provide personal data to the University for the particular purpose(s) stated below.

Project Title: Who wants to be a teacher and why?

Type(s) of personal data collected and held by the researcher and method of collection:

Personal data will be collected through an online survey. This will include your age, gender, previous career, motivations, aspirations, career satisfaction and perceptions.

Should you agree to be contacted at a later date for an invitation to interview, audio recordings of the interview will be collected.

Lawful Basis

- Collection and use of personal data is carried out under the University's public task, which includes teaching, learning and research.
- *For further information see https://durham.ac.uk/research.innovation/governance/ethics/governance/dp/legalbasis/*

How personal data is stored:

- All personal data will be held securely and strictly confidential to the research team.
- You will be sent an email with a survey link by your university. The survey will ask for your email address, name and a matched code so that the results from both surveys can be linked. Should you not wish to give your email address and name, the matched code will enable your results to be matched, but not identified as yours. The email address and name just enables an additional layer for results to be matched and less room for error; it also enables me to contact you if you give permission to be asked to interview. The personalised data will be deleted once the project has been completed. You have the right to withdraw at any stage.
- All personal data in electronic form will be stored on a password protected computer, and any hardcopies will be kept in locked storage. Data will not be available to anyone outside the research team.
- The online survey software does not enable the research to access information about the respondents IP address.
- If you are interviewed, the conversation will be recorded and stored on an encrypted device until it has been transcribed by the researcher. No-one else will have access to the recording, and it will be erased once the transcript has been completed.

How personal data is processed:

- Information will be entered into a database for analysis. After the project has been completed, personal data will be permanently and irretrievably deleted
- If you are interviewed, *the recorded conversation will be transcribed by the researcher, and personal information will be coded and anonymised. The original recording will then be erased.*

Withdrawal of data

- You can request withdrawal of your data until it has been fully anonymised. Once this has happened it will not be possible to identify you from any of the data we hold.

Who the researcher shares personal data with:
Relevant identifiable data will not be shared.

How long personal data is held by the researcher:
I will hold personal data until the end of the project, after which it will be anonymised. After the 10-year validation term, data will be destroyed.

How to object to the processing of your personal data for this project:
If you have any concerns regarding the processing of your personal data, or you wish to withdraw your data from the project, contact Sarah Ross, sarah.a.ross@durham.ac.uk

Appendix 5: Survey 2: Participant information sheet

Project title: Who wants to be a teacher and why?

Researcher(s): Sarah Ross
Department: Education
Contact details: sarah.a.ross@durham.ac.uk

Supervisor name: Stephanie Lichtenfeld
Supervisor contact details: stephanie.lichtenfeld@durham.ac.uk

Supervisor name: Helen Cramman
Supervisor contact details: helen.cramman@durham.ac.uk
You are invited to take part in a study that I am conducting as part of my EdD at Durham University.

This study has received ethical approval from the School of Education ethics committee of Durham University.

Before you decide whether to agree to take part it is important for you to understand the purpose of the research and what is involved as a participant. Please read the following information carefully. Please get in contact if there is anything that is not clear or if you would like more information.

The rights and responsibilities of anyone taking part in Durham University research are set out in our 'Participants Charter':
https://www.dur.ac.uk/research.innovation/governance/ethics/considerations/people/charter/

What is the purpose of the study?
The aim of this study is to…

- Investigate who chooses teaching and why, across different training routes. It also aims to investigate whether different 'teacher profiles' can be established based on the data collected.
- Timescale: 2 years

Why have I been invited to take part?
You have been invited because

- You are a trainee teacher undertaking a full-time, one-year postgraduate initial teacher training course.

Do I have to take part?
Your participation is voluntary and you do not have to agree to take part. If you do agree to take part, you can withdraw at any time, without giving a reason. Your rights in relation to withdrawing any data that is identifiable to you are explained in the accompanying Privacy Notice.

What will happen to me if I take part?
If you agree to take part in the study, you will…

- Be asked to complete the final survey at the end of your teacher training year. You may have also already completed a survey at the beginning of your teacher training.
- When completing the survey you can omit any questions you do not wish to answer.
- You will be asked whether you give consent to be contacted at a later date for an interview.

Are there any potential risks involved?

- There is no expected benefit to the participant other than contributing to the research on initial teacher training.
- No risks or discomforts have been identified.

Will my data be kept confidential?
All information obtained during the study will be kept confidential. If the data is published (in any form, including within a thesis, in an article or any other forms given below) it will be anonymous and will not be attributable to you, or to your University / training provider.

Full details are included in the accompanying Privacy Notice.

What will happen to the results of the project?
- The results will be published and the thesis is expected to be deposited in Durham e-theses: Durham University is committed to sharing the results of its world-class research for public benefit. As part of this commitment the University has established an online repository for all Durham University Higher Degree theses which provides access to the full text of freely available theses. The study in which you are invited to participate will be written up as a thesis. On successful submission of the thesis, it will be deposited both in print and online in the University archives, to facilitate its use in future research. The thesis will be published open access.
- No personal data will be shared, however anonymised (i.e. not identifiable) data may be used in publications, reports, presentations, web pages and other research outputs. At the end of the project, anonymised data may be archived and shared with others for legitimate research purposes.
- All research data and records needed to validate the research findings will be stored for 10 years after the end of the project.

Who do I contact if I have any questions or concerns about this study?
If you have any further questions or concerns about this study, please speak to the researcher or their supervisor. If you remain unhappy or wish to make a formal complaint, please submit a complaint via the University's Complaints Process.

Thank you for reading this information and considering taking part in this study.

Appendix 6: Survey 1

Section 2: Reason for choosing teaching

Briefly state your main reason(s) for choosing to become a teacher:

Section 3: Influential factors

For each statement below, please rate how important it was in YOUR decision to become a teacher from **1** (not at all important in your decision) to **7** (extremely important in your decision). Please click the numbered box that best describes the importance of each.

I chose to become a teacher because….. 1 (not at all important) 7 (extremely important)							
	1	2	3	4	5	6	7
I am interested in teaching							
Part-time teaching could allow more family time							
My friends think I should become a teacher							
As a teacher I will have lengthy holidays							
I have the qualities of a good teacher							
Teaching allows me to provide a service to society							
I've always wanted to be a teacher							
Teaching may give me the chance to work abroad							
Teaching will allow me to shape child/adolescent values							
I was unsure of what career I wanted							
I like teaching							
I want a job that involves working with children/adolescents							
Teaching will offer a steady career path							
Teaching hours will fit with the responsibilities of having a family							
I have had inspirational teachers							
As a teacher I will have a short working day							
I have good teaching skills							
Teachers make a worthwhile social contribution							
A teaching qualification is recognised everywhere							
Teaching will allow me to influence the next generation							
My family think I should become a teacher							
I want to work in a child/adolescent-centred environment							
Teaching will provide a reliable income							
School holidays will fit in with family commitments							
I have had good teachers as role-models							
Teaching enables me to 'give back' to society							
I was not accepted into my first-choice career							
Teaching will allow me to raise the ambitions of underprivileged youth							
I like working with children/adolescents							
Teaching will be a secure job							
I have had positive learning experiences							
People I've worked with think I should become a teacher							
Teaching is a career suited to my abilities							

A teaching job will allow me to choose where I wish to live							
I chose teaching as a last-resort career							
Teaching will allow me to benefit the socially disadvantaged							
Teaching will allow me to have an impact on children/adolescents							
Teaching will allow me to work against social disadvantage							

Section 4: Beliefs about teaching

For each question below, please rate the extent to which YOU agree it is true about teaching from **1** (not at all) to **7** (extremely important). Please click the numbered box that best describes your agreement for each.							
	1	2	3	4	5	6	7
Do you think teaching is well paid?							
Do you think teachers have a heavy workload?							
Do you think teachers earn a good salary?							
Do you believe teachers are perceived as professionals?							
Do you think teachers have high morale?							
Do you think teaching is emotionally demanding?							
Do you believe teaching is perceived as a high-status occupation?							
Do you think teachers feel valued by society?							
Do you think teaching requires high levels of expert knowledge?							
Do you think teaching is hard work?							
Do you believe teaching is a well-respected career?							
Do you think teachers feel their occupation has high social status?							
Do you think teachers need high levels of technical knowledge?							
Do you think teachers need highly specialised knowledge?							

Section 5: Your decision to become a teacher

For each question below, please rate the extent to which it is true for YOU from **1** (not at all) to **7** (extremely important). Please click the numbered box that best describes your agreement for each.							
	1	2	3	4	5	6	7
How carefully have you thought about becoming a teacher?							
Were you encouraged to pursue careers other than teaching?							
How satisfied are you with your choice of becoming a teacher?							
Did others tell you teaching was not a good career choice?							
How happy are you with your decision to become a teacher?							
Did others influence you to consider careers other than teaching?							

Section 6: Personal information

6. Route into teaching (please choose one):
University-led PGCE
School Direct (salaried)
School Direct (tuition fee)
SCITT – School Centred Initial Teaching training
Teach First Leadership Development Programme

Researchers in Schools (including Maths and Physics Chairs Programme)
Troops to teachers
Postgraduate Early Years Initial Teacher Training
Postgraduate Teacher Apprenticeship

7. Why did you choose the above provider to train as a teacher? Choose up to three reasons.
Location
Training cost
Strong reputation
Credits towards a masters
Qualification awarded
Because it was university-led
Because it was school-led
Small number of students
Cost of fees
Other
7.a If you selected other, please specify

8. Phase
Primary Early Years
Primary
Secondary

9. Qualification awarded by route
Qualified Teacher Status (QTS)
PGCE + QTS
PGDE +QTS
EYTS (Early Years Teacher Status)
Other
9.a If you selected other, please specify

10. Gender
Male
Female
Prefer not to say
Other
10.a If you selected other, please specify

11.Age
18-24
25-34
35-44
45-54
55-64
65-74
74+
Prefer not to say

12. Highest qualification to date
Undergraduate degree

Masters
Doctorate
Other
Prefer not to say
12.a If you selected other, please specify

13. Undergraduate degree classification
3rd
2:2
2:1
1st
Prefer not to say

14. Is this your second career?
Yes
No
14.a What was your previous career?
Manager, director or senior official
Professional occupation
Associate profession / technical occupation
Administrative / secretarial occupation
Skilled trade occupation
Caring / leisure / other service occupation
Sales / customer service occupation
Process, plan or machine operative
Elementary occupation

Appendix 7: Survey 2

Section 2: Professional plans

Please tick the box below that best describes your professional plans:
I do not want a teaching career
I want to teach in the short-term but later want to pursue a different profession
I want my whole career to be in the teaching profession

Option: I do not want a teaching career
Why do you not want a teaching career? Please specify the career you want/are interested in. Do you think your plan of not wanting to pursue a career in teaching has been affected by COVID-19 Yes No If you answered yes, please explain how COVID-19 has changed your plans

Option: I want to teach in the short-term but later want to pursue a different profession
Why do you want to teach in the short-term but later want to pursue a different profession? Please specify the career you want/are interested in. How many years until you plan to pursue it? 1 year 2 years 3 years 4 years 5 years 6 years 7 years 8 years 9 years 10 years + Other If you selected Other, please specify. Do you think your plan of only wanting to pursue teaching for the short-term has been affected by COVID-19? Yes No If you answered yes, please explain how COVID-19 has changed your plans

Option: I want my whole career to be in the teaching profession
Why do you want your whole career to be in the teaching profession?? Do you think your plan of only wanting to teach for your whole career has been affected by COVID-19? Yes No

If you answered yes, please explain how COVID-19 has changed your plans.

Section 3: Professional plans

For each questions below, please rate how much you agree from **1** (not at all) to **7** (extremely). Please click the numbered box that best describes the importance of each.							
Please rate using: 1 (not at all important) 7 (extremely important)							
	1	2	3	4	5	6	7
How hard will you strive to be an effective teacher?							
How carefully have you thought about becoming a teacher?							
How certain are you that you will remain in teaching?							
How much will you work at being a good teacher?							
How satisfied are you with your choice of becoming a teacher?							
How confident are you that you will stick with teaching?							
How much effort will you put into your teaching?							
How happy are you with your decision to become a teacher?							
How sure are you that you will persist in a teaching career?							
How much effort do you plan to exert as a teacher?							
How content are you with your choice of a teaching career?							
How sure are you that you will stay in the teaching profession?							

Section 3: Development in the profession

For each question below, please rate the extent to which you aim to do it from **1** (not at all) to **7** (extremely important). Please click the numbered box that best describes your agreement for each.							
To what extent do you aim to…..							
	1	2	3	4	5	6	7
… continue learning how to improve your teaching skills?							
… have leadership responsibility in schools?							
… undertake further professional development?							
… reach a position of management in schools?							
… continue to acquire curriculum knowledge?							
… seek a staff supervision role in schools?							
… participate in professional development courses?							
… take up a leadership role in schools?							
… learn about current educational developments?							

Section 6: Personal information

Did you complete Survey 1 in the Autumn Term?

Yes
No

Option: Yes
Please provide your matched code so your answer can be matched to Survey 1. Matched code (first three letters of your place of birth, YY of birth, firs two letters of your mother's name). e.g. the following answers Aberdeen, 1987 and Sophie would equal a matched code of abe87so
Please type in your matched code again (first three letters of your place of birth, YY of birth, firs two letters of your mother's name). e.g. the following answers Aberdeen, 1987 and Sophie would equal a matched code of abe87so