The Viewpoints of Pupils Regarding Post-16 Education and Training Opportunities: A Q Methodology Study.

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Thesis submitted to the University of Nottingham for the degree of Doctor of Applied Educational Psychology

May 2020

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Glossary of Terms

Some key terms will be employed throughout this research study. A definition of each term is provided here to ensure a shared understanding between the researcher and reader and to provide consistency and clarity for the reader:

Further Education: This refers to any compulsory study or training following secondary education. It includes all post-16 learning routes (Department for Education [DfE], 2019). Throughout this study the term 'Post-16 Education and Training' will be employed to describe further education.

Children: The United Nations Convention on the Rights of the Child (1989) defines a child as any person under 18. In England *all* children are legally classed as a child until their 18th birthday (DfE, 2018). The terms 'children' and occasionally 'pupils' or 'young people' will be used to represent any person under the age of 18.

Viewpoints: In the context of this study a 'Viewpoint' is defined as the views held by an individual or group of people regarding a certain topic. Viewpoints are subjective and define how an individual construes a topic area, or how a group of people, collectively, construe a topic area in a similar way. The term 'viewpoints' will be discussed in more detail in chapters 2, 3 and 4.

Acknowledgements

The last three years have taken me on an incredible journey, leading to the completion of this research and a Doctorate in Applied Educational Psychology. This would not have been possible without the support of the following people. I would like to express my gratitude to:

- The Academic tutor team at the University of Nottingham for their continuous encouragement and support throughout the three years. With special thanks to Nathan Lambert for his constant enthusiasm, support and guidance.

- The participants of this study for their time, contribution and genuine interest.

- My employers, the Local Authority, for the opportunities and flexibility they have afforded me, ensuring I continue to develop my practice.

- Cohort 12 – my fellow TEPs – for their emotional support, psychological insights and above all their friendship.

- My family and friends for their endless encouragement and guidance, especially my husband for '*keeping the faith*' and supporting me through this challenging journey.

Abstract

The drive to improve outcomes for all children beyond the age of 16 has been a focus of the political agenda in the UK for several decades. Research in the area has suggested that compelling children to remain in education or training until the age of 18 can promote their academic outcomes and employability (Department for Education and Skills, 2007a). The Education and Skills Act 2008 consequently raised the age of compulsory education or training to 18. This change has, however, not been without challenge and a number of parties have raised particular concerns that the voices of children are not being heard on the matter (Widdowson, 2018) and that policymakers do not have a clear understanding of children's needs in this regard.

It is often noted in the literature that children have the capacity to contribute in a meaningful way to the design of educational provision (Hart, 1992; McLarty & Moran, 2009). It is therefore important to explore the views of children regarding post-16 provision and the recent changes to the delivery of that provision.

A Q-methodological approach was adopted to explore the viewpoints of 32 Key Stage Four (KS4) pupils regarding post-16 education and training opportunities. This approach brings together the complementary nature of qualitative and quantitative research methods, revealing the participants' subjective and divergent viewpoints. The data from the Q methodology study was analysed using a by-person factor analysis and the following three distinct viewpoints were identified:

1. *Suitable, preferable and enhancing*;
2. *Unsuitable and impractical but preferred*; and
3. *Beneficial but an unnecessary requirement*.

These findings show disparities among children and disparities between children and policymakers who have made assumptions about their beliefs. The identification of these disparate viewpoints helped to pinpoint implications for professional practice

that could be useful in ensuring all children benefit from participating in education or training post-16.

1. Introduction

This research aims to explore the viewpoints of children regarding post-16 education and training following the implementation of the Education and Skills Act 2008.

It is often said that education can benefit society in many ways – not least by equipping children with the basic skills required to successfully enter the labour market (Kenny & Neale, 2015). Historically, compulsory education in England and Wales ended at 16, albeit with children being *encouraged* to continue in education and training beyond that age, with the majority doing so (Spielhofer et al., 2009). A small proportion of children, namely those who do not acquire qualifications, attempt to enter the workforce at 16. This often leads to a job without training or unemployment.

In the UK a 2007 Green Paper proposed raising the age of compulsory participation in education or training to 18, with the aim of equipping all children with the skills necessary to enter the labour market. This ultimately led to legislative changes and the eventual introduction of the Education and Skills Act 2008 (DfES, 2007a; 2007b). The educational research literature informing these legislative changes documented several positive gains from widening 'staying on' in education post-16. For example, research indicated a greater likelihood of leavers gaining employment (Bono & Galindo-Rueda, 2006) and improvements in future earnings (Brunello et al., 2004). However, the research also pointed to the potential difficulties 'staying on' might present for some children, with some arguing that there was a lack of suitable educational pathways open to children.

In order to understand the efficacy of the systems now in place, it is important to capture the viewpoints of children with regard to both their experiences of dealing with the current demands of staying on in education post-16 and their experiences of the reformed processes. These viewpoints should also shape any future reforms to post-16 provision (Children's Commissioner, 2007). However, children's voices have, it seems, so far been largely neglected on this matter (Widdowson, 2018). This research aims to provide a unique contribution to the existing literature within this area by using

Q methodology to explore the views of children regarding current post-16 education and training opportunities.

1.1 Professional and Personal Motivations for Research

The Local Authority (LA) where the researcher was on placement as a Trainee Educational Psychologist (TEP) is a key stakeholder in this research. The LA has recognised that current practices in post-16 are not sufficient in meeting the needs of all children. In light of this, the LA has devised a working party to improve the local post-16 education and training offer and provision. This research seeks to access and explore the views of secondary-aged children at the point of decision-making about post-16 education and training. The research will explore commonalities and differences in the views held by children. The findings will inform the LA's planning and implementation of post-16 provisions and policies.

The researcher is personally motivated by her experiences in a previous professional role, where she worked with children who experienced difficulties in education that often lead to unemployment. These experiences offered an insight into the frustrations and helplessness felt by some children, who apparently come to accept that their aspirations may not be fulfilled. The researcher personally experienced feelings of confusion, uncertainty and isolation around the age of 16 when required to make decisions about her own education and employment. These experiences have led to a professional curiosity regarding how children in Key Stage Four (KS4) view post-16 education and training opportunities, and a determination to develop further insight in this area so as to help inform the planning and implementation of accessible provision for all children. The author works in the EP field and therefore can be actively involved in supporting children transitioning from KS4 to post-16. EPs can work individually with a child to capture their views of post-16 (Tyson, 2011) and at a strategic level with secondary schools and post-16 providers to encourage children's active engagement in the development of post-16 provision (Craig, 2002).

Q methodology can integrate both qualitative and quantitative methodologies and reveal a wide range of views extant among a group of participants. This methodology was selected as the means of data gathering and analysis for the present undertaking

on the basis that it is able to explore and make sense of a highly complex and socially contested subject matter from the perspective of the participants (here, children). It aims to uncover the subjective viewpoints of a range of participants, especially those on the margins, and reduces the influence of the researcher by allowing the participants to directly inform the research findings.

1.2 Overview of the Thesis

The research will be presented through in following chapters:

- Chapter 2: Literature review – This chapter considers existing research relating to post-16 education legislation, the rights of children and their role in policymaking on the matter. A systematic review focuses on the views held by secondary-aged children regarding post-16 education and training opportunities.

- Chapter 3: Methodology – This chapter documents the ontological and epistemological stance of the researcher, the origins and aims of the undertaking, and the process of Q methodology. It presents ethical considerations, considers alternative methodological approaches and discusses the strengths and limitations of Q methodology.

- Chapter 4: Results – This chapter presents the data analysis and interpretation of findings following the Q-methodological approach. The viewpoints of secondary-aged children are presented and categorised into key findings.

- Chapter 5: Discussion – The final chapter summarises the key findings from the research and considers how they relate to the findings in the literature review. The implications for professional practice and potential for future research are discussed. The chapter concludes by presenting a brief summary of the findings and highlighting the unique contribution of the research in relation to the existing literature in this area.

2. Literature Review

2.1 Overview of the Literature Review

The literature review aims to present research and literature relating to post-16 education and training opportunities to provide context and a foundation for the research undertaken in this study. The literature review is divided into the following sections:

- Compulsory Education and Economic Prosperity;
- The Role of Post-16 Education and Training;
- Post-16 Education and Training Reforms;
- The Introduction of the Education and Skills Act 2008;
- Post-16 Education and Training Landscape;
- Implications and Impact of Legislative Changes in Education;
- The Rights of Children;
- Methodologies Used to Capture Pupils' Views;
- Summary of the Narrative Literature Review;
- Systematic Literature Review; and
- Summary of the Systematic Literature Review and Rationale.

2.2 Compulsory Education and Economic Prosperity

'Education for all children' was first introduced under the Elementary Education Act 1880 and compelled all LAs to provide a place for children *up to the age of 10* in an education setting. Driven by the desire to ensure all children possessed the skills required to seek employment, the age of compulsory education continued to rise over the next century reaching the age of 16 by 1972, where it remained for a number of decades (Gillard, 2018).

Education is often described as a major determinant of economic growth and prosperity. High levels of educational attainment are seen to equip society with the skills to function and compete on a global scale, which in turn increase productivity, future growth rates and national income (Wolf, 2004). This is said to be the view of

many politicians and it therefore plays an influential role in any decision-making about educational spending and governance. It has to be acknowledged, however, that this view has a weak evidence base – there are, in fact, numerous factors of relevance in creating a more productive and economically prosperous workforce (Wolf, 2004), education being just one.

2.3 The Role of Post-16 Education and Training

The particular benefits of education post-16 were most recently highlighted by the Labour government in 1997. A change in parliamentary leadership sparked an interest in post-16 education with the sole aim of improving education for all children beyond 16 (Gillard, 2018). That same year, the Kennedy report, 'Learning works: Widening participation in further education', was published. In this report clear links were made between further education and economic prosperity, with a focus on developing an equitable process that ensures all children have the opportunity to succeed beyond 16. Kennedy (1997) suggested that people entering the UK's workforce in the 21st century would require the skills, knowledge and understanding needed to effectively compete in a fast-changing global economy. Her report made a variety of recommendations, including developing a campaign to create a 'learning nation', focusing public resources on children who experienced less success in their earlier education and establishing the notion of 'lifetime entitlement to education' (Kennedy, 1997). The 1999 White Paper, 'Learning to succeed: A new framework for post-16 learning', marked the start of resultant changes to the post-16 curriculum and qualifications, the focus being on more inclusive and flexible educational pathways in post-16 education that are able to meet the needs of all children and their potential employers.

The publication of the 2003 Green Paper, 'Every child matters', again placed the spotlight on the benefits of post-16 education. The government, on this occasion, proposed a commitment to encouraging all children to stay on in education and training until the age of 19, aiming to ensure a successful transition to adulthood and the world of work (DfES, 2003). This proposal led to several educational reforms including a more flexible 14–19 curriculum, a careers advice service and the Educational Maintenance Allowance scheme (Payne, 2003). These reforms were presented as

being vital to both the UK's economy, in equipping people with the skills employers need, and to every child, in supporting their needs and aspirations (DfES, 2005).

In 2006 the Leitch Review examined the UK's optimal skills mix to understand how to maximise economic growth, productivity, and social justice. This appeared to be timely given that the government had, for a number of years, promoted the benefits of remaining in education. The review noted several successes, for example the UK having, at the time, the highest employment rate in the G7, rising school standards and a growth in graduate numbers. However, the review also reported that the UK's skills base was weak by international standards (Leitch, 2006). More specifically, the review noted that the number of children in the UK participating in education post-16 was below the Organisation for Economic Co-operation and Development (OECD) average, as shown in Figure 2.1. The report also noted that more than one in six children left school unable to read, write and add up properly (Leitch, 2006). This review suggested that despite the changes in legislation and encouragement to remain in education beyond 16, the participation in post-16 education appeared to be lower than expected and was a matter of ongoing concern.

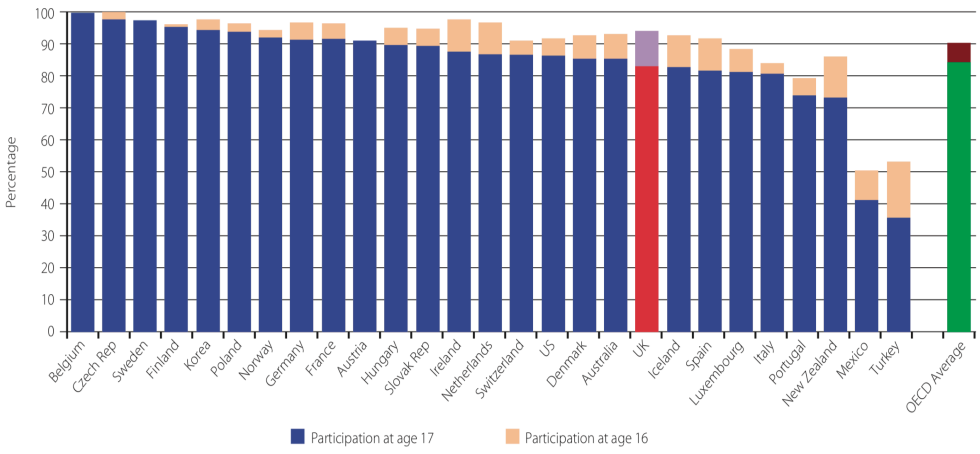

Figure 2.1: A bar chart to show the net enrolment rates in education post-16 globally in the year of 2006.

2.4 Post-16 Education and Training Reforms

In light of OECD findings, the DfES in 2007 began to consult on reforms to post-16 education and training opportunities, with a desire to foster social and economic development in education and social policy. The DfES (2007a) hoped to design a

system that would support every child's individual needs and aspirations. Their sole aim was to support the notion that:

> Today's young people are tomorrow's entrepreneurs and community leaders, therefore we owe it to them, to give them the chance to show their talents and reach their potential.
>
> (DfES, 2005, p.3)

This led to the publication of the 2007 Green Paper, 'Raising expectations: Staying in education and training post-16', which proposed that all children should be required to participate in education or training until the age of 18 (DfES, 2007a). The Green Paper proposed that those who drop out of education at 16 due to low achievement were being let down by society as it was no longer viable to enter the workplace at that age (DfES, 2007a). It also suggested that decisions children make at 16, after leaving compulsory education, have a major impact on their prospects. Along with the governmental report outlined in the Green Paper, the DfES (2007b) commissioned an external review of the national and international research evidence to explore the likely impact, benefits and challenges of increasing the compulsory participation age to 17 from 2013 and to 18 from 2015 onwards. The study reviewed research findings dating back to the latter part of the 20th century, selecting countries where a rise in the age of compulsory participation in education had been implemented (Spielhofer et al., 2007). The findings from each study were as follows:

- Bynner (2004) found that high educational attainment was associated with increased opportunities in employment in the UK.
- Iannelli and Paterson (2005) found that the acquisition of higher educational qualifications resulted in a clear advantage when entering the labour market in Scotland.
- Bono and Galindo-Rueda (2006), examining data from the second half of the 20th century in England and Wales, following changes to the age of compulsory participation in education in 1972, found that additional qualifications had a positive effect on employment and earning potential.

- Brunello et al. (2004) found that additional education reduced conditional wage inequality based on the distribution of earnings from 12 European countries.
- Oreopoulos (2006) found that increasing participation in education for a further year was associated with a 0.19 increase in grade attainment in Canada.

In 2008 the Department for Children, Schools and Families (DfCSF) carried out a consultation to explore how the proposed changes outlined in the Green Paper should be implemented. The consultation process received responses from 443 groups and individuals, and suggested a wide acceptance of the commitment to increase the age of participation on the proviso that the needs of the people and employers come first. The majority of respondents felt that the proposed changes would benefit those not in education, employment or training (NEET) and provide opportunities for improvements in careers advice and provision. Respondents also felt that the changes would provide greater choice for learners and, in the long term, create a more dynamic economy by upskilling the workforce (DfCSF, 2008). In 2009 the DfCSF reported findings from a longitudinal study which tracked year 11 pupils in 2005/06 to the age of 18. The study found an overall increase in participation in education and training post-16, alongside an increase in the proportion of 17-year-olds achieving a level two or higher qualification (Thompson, 2009).

These studies and consultations suggest that compelling early school leavers to remain in education longer can have important gains. Collectively they suggest that raising the age of compulsory participation in education may have a strong impact on school leaving behaviour and on qualifications achieved by the age of 16. This appears to be important in the 21st century, with rapidly developing technologies, growing international competition and the suggestion that the UK's skills base requires much-needed attention (Leitch, 2006).

It is important, however, to consider that some of these effects may only be temporarily stable. For example, Raimondi and Vergolini (2017) investigated the effects in Italy of the Berlinguer reform compelling children to stay in education until the age of 15 or 16. The study found that most 16-year-olds stayed on in education; however, by 17 these effects had vanished with no effect found on graduation rates. Moreover, in the

UK, Thompson (2009) found some children compelled to stay in education longer were still unemployed by the age of 17. It should also be remembered that the findings drawn from international studies conducted in Europe and Canada may not apply *directly* to the English context due to cultural and systemic differences (Spielhofer et al., 2007). It cannot be assumed, that is, that the changes in England will have the same impact as was experienced elsewhere, nor can it be assumed that the proposed changes will be beneficial for all (Spielhofer et al., 2007).

2.5 The Introduction of the Education and Skills Act 2008

The Education and Skills Act 2008 ultimately specified that all children in England must stay in education or training until the age of 18, with a duty on children to participate and on parents to assist their children to participate. The Act also set out the following duties: for employees to release children one day a week to undertake training elsewhere if they do not provide this in-house; for LAs to ensure children participate and to provide careers advice and support services; and for LAs to assess the education and training needs of children aged 16–19 with Special Educational Needs and Disabilities (SEND). The Act stated that LAs would have a statutory duty to deliver full participation in education and training for all 17-year-olds by 2013 and all 18-year-olds by 2015. Additionally, from 2010 onwards LAs were tasked with a duty to secure sufficient provision for children up to the age of 19 (or 18 for those in juvenile custody), and, for learners with SEND, up to the age of 25. By 2015 all children had to do one of the following until the age of 18:

- stay in full-time education at a school or college;
- work (20 hours or more a week) combined with part-time education or training; or
- volunteer (20 hours or more a week) combined with part-time education or training (DfCSF, 2008).

It was assumed by policymakers that children would view participation in post-16 education or training as beneficial and therefore would willingly participate. However, there is no penalty for those who did not fulfil their duty (DfCSF, 2008).

2.6 Post-16 Education and Training Landscape

The current four main qualification routes in post-16 education and training are

- academic qualifications, for example A-levels or Advanced Highers – suitable for people who have an interest in a specific topic or wish to go to university;

- Applied Learning, for example BTEC Diplomas or Cambridge Technicals – suitable for people who are interested in a particular job and want to combine practical and theoretical learning;

- technical qualifications, for example NVQs or Technical Certificates – suitable for people who know what sort of job they would like and want a course that includes work experience;

- functional skills, for example English, Maths and Science basic skills – suitable for people with minimal pre-16 qualifications (UCAS, 2019).

Children have a range of options available to them. These options are defined as follows:

- attend a college or a training provider to study a range of subjects or work-related courses full-time, for example A-levels, NVQs and BTECs;

- train whilst they work, for example taking on an apprenticeship, traineeship or supported internship; or

- work and/or volunteer whilst studying part-time (UCAS, 2019).

Children can attend sixth form colleges, further education colleges or any other work-based adult and community learning institutions (UCAS, 2019).

In preparation for post-16 education and training, the government recommend that secondary schools have an effective careers programme. This programme should include a combination of impartial and independent careers advice and guidance, career education embedded in the curriculum and opportunities for children to engage with employers (House of Commons Business, Innovation and Skills and Education Committees, 2016). The DfE, in addition, have developed a Preparation for Adulthood (PfA) programme in conjunction with the National Development Team for Inclusion. This programme suggests that all children should have access to clear, evidenced-based employment pathways post-16 with good careers advice and guidance to help them with their decision-making from year nine (PfA, 2013).

Professor Alison Wolf, in a review of vocational education, recommended that post-16 study programmes should offer students breadth and depth, without limiting their options for future study or work, and that all children should be able to gain real experience and knowledge of the workplace, in order to enhance their employability skills (Wolf, 2011). In 2019 the DfE developed a guidance document for 16–19 education providers. This guidance states that every study programme must have a core aim for each student and be personalised to their needs. Most pupils must either select one or more academic, applied or technical qualifications to prepare for further education or employment, or select a work placement to prepare for an apprenticeship or other employment. Exceptions may be made, for example where a pupil finds they have made the wrong programme choice or transfers to a traineeship after an initial period of vocational training or employability support (DfE, 2019).

2.7 Implications and Impact of Legislative Changes in Education

2.7.1 Implications of legislative changes in education

A summary of the findings from international studies presented earlier in the review reported the benefits of changes to compulsory schooling, as long as post-16 pathways are available to suit the needs of all children and promote their opportunities of securing future employment (PfA, 2013; Wolf, 2011). With this in mind, a number of potential challenges emerge: for example, children who typically choose not to participate in post-16 education may require encouragement, high-quality guidance

and support and several educational pathways to ensure suitability (Bono & Galindo-Rueda, 2006; Spielhofer et al., 2007).

The potential challenges that a rise in compulsory education may bring have been explored in various studies. For example, Bloomer and Hodkinson (1997) conducted interviews with 11 pupils in the final year of secondary school and found that, despite expressing a desire to stay on in education post-16, the pupils found matching learning opportunities (post-16 pathways) to their interests, needs and aspirations a difficult and arduous process. Payne (2003) reviewed the literature relating to how and why children make their choices about post-16 pathways. The findings show that many children are motivated to stay on in education after the age of 16 because they wish to go to university. However, for others this may seem an alien culture in which they would feel out of place. This study also found that some children may wish to enter the workplace at 16. Haywood et al. (2009) explored the views of professionals working with children in response to the changes outlined in the Education and Skills Act 2008. The findings noted that engagement in education post-16 may not be a simple choice for some, citing that some may feel disengaged from education as a result of negative schooling experiences. The report recommended that post-16 provision needs to offer a flexible curriculum to ignite an interest in learning and that professionals should communicate with children to respond to their needs and aspirations.

A study by Spielhofer et al. in 2009 explored the barriers to participation in post-16 education and training. This study was conducted using a survey of 2029 students in year 11, complemented by interviews with 819 children and 102 parents. The study reported that 86 per cent of children did not experience any barriers preventing them from participating in post-16 education and training, with the other 14 per cent citing at least one barrier preventing them from doing what they wanted. Some of the main barriers reported were insufficient funding, inadequate availability of provision and a lack of awareness of post-16 education and training (Spielhofer et al., 2009). In another study McLarty and Moran (2009) found that children felt uninformed about the options available to them. For example, children aged 14–18 reported that they were not given all the information they required with regard to vocational and academic routes post-16.

A failure to listen to children at the point of decision-making could, of course, be problematic: it might, for example, lead to feelings of frustration, owing to needs and expectations regarding post-16 provision being unmet. This has been illustrated in the earlier cited study conducted by Bloomer and Hodkinson (1997). It was argued that the difficulties children experience in matching post-16 pathways to their interests, needs and aspirations may lead to some deciding simply not to participate in post-16 education and training.

2.7.2 Impact of legislative changes in education

Examination of the UK statistics since the implementation of the rise in the age of participation in education presents some interesting findings. For example, after the age of participation in education was increased to 17 in 2014, the number of people aged 16 to 18 classified as NEET fell to its lowest level since records began 20 years previously. In addition, a 2.4 per cent increase in the number of 16-year-olds in full-time education was also reported (DfE, 2015). These findings, whilst promising, do not indicate a causal relationship between the rise in the age of participation and the increase in participation in further education, however, and are still based on only a partial implementation of the legislation. Therefore, caution is necessary: it is still too early to draw firm conclusions on the impact of these changes. Indeed, the rates of participation in education, training and employment of people aged 16 to 18, published by the Office for National Statistics (ONS) in 2018, show that there has been a further increase in participation among 16- and 17-year-olds, raising the figure to its highest level since records began. For people aged 18, however, a rise in those classified as NEET was reported (ONS, 2019).

A briefing published by the Children's Commissioner in 2019 reports similar concerns to those of the ONS (2019) relating to people aged 18 and above. The report found an 8 per cent rise in the number of people leaving education at 19 without qualifications since 2015. The report suggests that the educational reforms regarding post-16 education may have penalised those from a disadvantaged background. For example, those receiving free school meals (FSM) were shown to be twice as likely to leave education without qualifications (as shown in Figure 2.2). These disadvantaged pupils

are the very people the legislation had sought to support (Children's Commissioner, 2019). In addition, the significant increase in the number of people not achieving qualifications since 2015 reverses more than a decade of substantial progress in reducing the number of people leaving education without essential qualifications (Children's Commissioner, 2019).

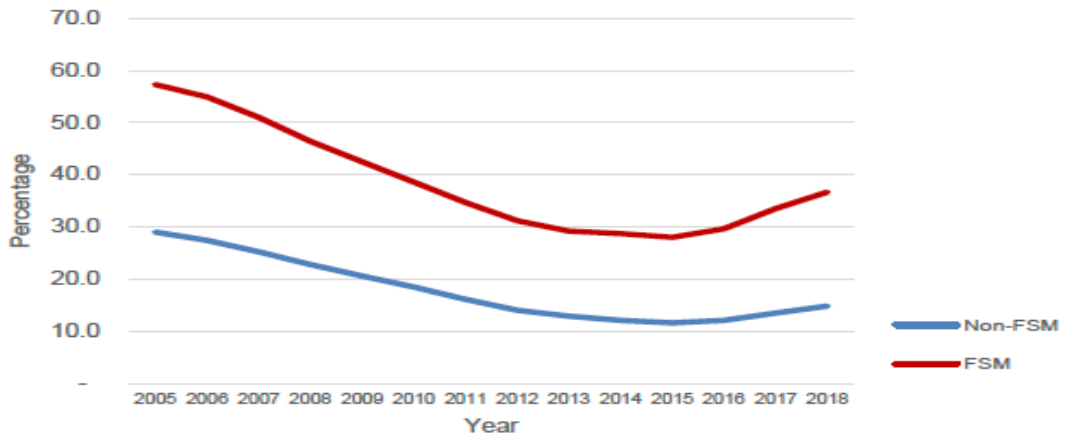

Figure 2.2: A line graph to show the percentage of people leaving education at the age 19 without qualifications of level two or higher, an FSM/non-FSM comparison.

These findings appear to have been predicted in the Wolf report (2011) commissioned by the DfE to investigate how education can ensure progression to higher learning and employment. Here it was estimated that 25 per cent of people aged 16 to 17 would gain very little from post-16 education and training.

The statistics also indicate weaknesses in the UK's skills development in relation to its comparator countries, for example France, Germany and the United States. The UK performs poorly on intermediate professional and technical skills and is forecast to fall from 22nd to 28th out of 33 OECD countries for intermediate skills by 2020 (Department for Business, Innovation and Skills, 2016). These statistical findings may be a cause for concern given the recent political and economic changes brought about by the decision to leave the European Union and therefore the greater need for a highly skilled workforce (Widdowson, 2018)

Overall, the impact of the rise in the age of participation in education in England is relatively unknown, partially, of course, as a result of the recency of the changes. The

findings to date suggest that staying on in education post-16 may be helpful for most children but perhaps not for all (Lawy & Diment, 2009; Payne, 2003). Therefore, the requirement for all children to stay on in education post-16 may be problematic. These findings also illustrate the potential challenges that raising the age of participation may have brought. For example, staying on in education may not lead to improved chances of securing employment at 18 or of acquiring a higher level of qualifications.

Locally, in the host authority in which this research was undertaken, there is recognition of a need to accelerate improvements in both the quality and choice on offer for children. This is based on the idea that the current post-16 provision is insufficient in meeting the needs of all children and is not responsive to the legislative changes. The host authority accept that there is a need to consult with children to gain an understanding of their needs as a means of informing post-16 provision planning (Bradford Council, 2015).

2.8 The Rights of Children

2.8.1 The rights of children

Historically, there was an expectation that children 'should be seen and not heard'. However, over time society, with the development of human rights treaties, has repositioned its thinking. Children having the right to be heard has been widely accepted and ratified by many countries throughout the world for several decades. This acceptance is now being driven by the creation of the human rights treaty, the United Nations Convention on the Rights of the Child (UNCRC, 1989), which came in to force for the UK in 1992. A number of articles within the treaty detail the specific rights of children. For example, Article 12 states that children have the right to have their views respected in all matters affecting them; Article 13 states that children must be free to express their views; and Article 29 states that education must develop a child's abilities and talents to the full. In addition, the Mental Health Capacity Act 2005 states that people aged 16 and over have the right to make their own decisions, provided that they are able to do so, and that their rights should be protected. From a developmental perspective, Blakemore (2018) reports that by their late teens, a person's sense of self has developed: they have a clear idea of who they are, how

they are and who they would like to be. Taking into consideration the rights of children and their capacity to make decisions, it seems highly important that we consult children to understand their needs post-16.

The right to be heard, along with the right to be included in the decision-making process, has also been endorsed in legislation and educational policies. For example, the Salamanca statement, devised in 1994 by 92 governments and 25 international organisations, emphasised that every child has unique characteristics, interests and learning abilities, and therefore education systems should be designed and implemented to take into account the wide diversity of needs (United Nations Educational, Scientific and Cultural Organization, 1994). The Children and Families Act 2014 further endorsed that children have the right to participate in decisions relating to their lives. The SEND Code of Practice (DfE and Department of Health [DoH], 2014) states that children with SEND *should* be involved in decision-making regarding local educational provision, with the hope of promoting outcomes and securing future employment.

2.8.2 The participation of children in education: Policy and practice

If children are seen as having the right to be heard, the capacity to make important decisions and the right to be involved in decision-making, it seems fitting that they are involved in the design and planning of post-16 provision.

Children's participation in various aspects of decision-making relating to post-16 education and training provision has been promoted in a number of policy documents produced by public bodies. For example, the 11 million report explored the views of people who experienced underachievement in secondary school and recommended that children be given a more significant voice in their education and post-16 provision planning (Children's Commissioner, 2007). Conceding that viewpoints may differ and that a 'one size fits all' approach may not be suitable, a policy paper published by the DfE (2011) following a period of consultation with children and professionals suggested that the teenage years of a person's life are an important time for making significant life choices and decisions. This paper emphasises that children have valuable ideas to improve the world around them, including education, with energy

and enthusiasm. McLarty and Moran (2009) emphasise the importance of listening to the views of children as this can inform the development of practical solutions to ensure that learning post-16 is as engaging as possible. The research here suggests that gathering the views of children regarding post-16 education and training opportunities enables us to develop an understanding which can inform post-16 policies, provision and practice.

A variety of helpful models have been devised to consider how children can effectively share their views on matters that concern them and how it can be ensured that these views are given equal weight during the decision-making process. These models were created in response to findings in the literature stating that a child's right to make their views known is widely violated and disregarded on an international scale (Shier, 2001).

The first and most influential model is the 'Ladder of Participation' developed by Hart in 1992. This model, depicted in Figure 2.3, was developed to consider how children participate in community programmes, focusing on the role adults play in relation to children. Hart (1992) devised the model using the metaphor of a ladder to conceptualise how children, in partnership with adults, can achieve their different climbing goals. The model is an adaptation of Arnstein's (1969) 'Eight rungs on the ladder of citizen participation' model.

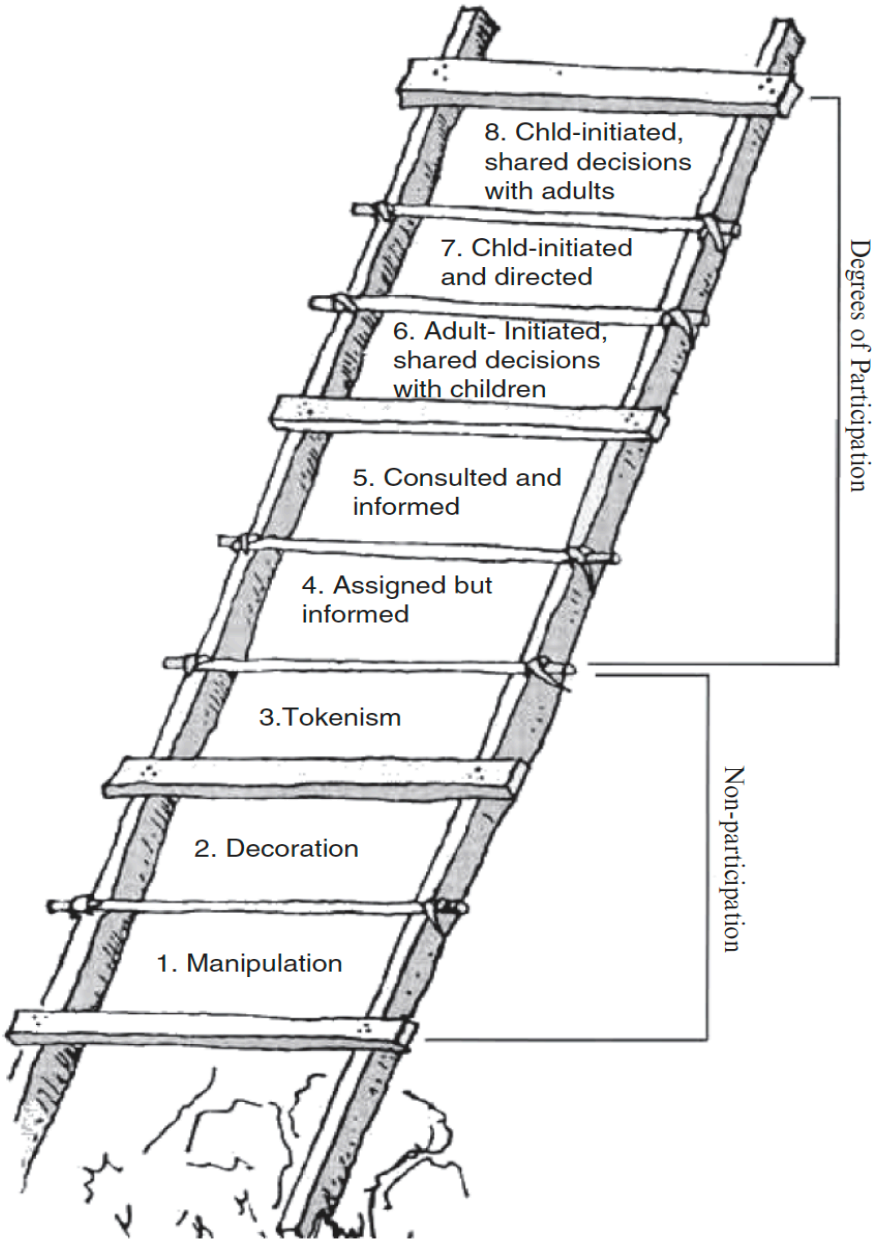

Figure 2.3: An image representing Hart's (1992) Ladder of Participation model.

Hart's (1992) Ladder of Participation model identifies the eight levels of children's participation from non-participation to participation. Hart (2008) states that the different rungs of the ladder are equal and the higher rungs represent a child being afforded the opportunity to exercise their right to be heard and be involved in decision-making. The model considers not a child's capabilities, but their opportunities to actively participate in and initiate their own projects and make key decisions. This notion stresses that children should be given the opportunity to make decisions and feel that they have the confidence and competence to do so. Whilst children may not always

choose to participate in the higher rungs of the ladder, it must be communicated to them that they have the option, so that their potential as autonomous beings can be realised (Hart, 2008). This model has been used by numerous professionals to critically evaluate how they work with children. It enables them to look at current ways of working on a systemic level and develop more inclusive methods based on their context.

In 2001 Shier developed the tool 'Pathways to Participation' based on Hart's 1992 Ladder of Participation, focusing on the rungs of the ladder examining participation, with the intention of helping professionals to explore solely the different aspects of the participation process. This model does not, therefore, make reference to the three lowest rungs of Hart's (1992) model, which are labelled as non-participation. The Pathways to Participation model consists of five levels:

1. Children are listened to.
2. Children are supported in expressing their views.
3. Children's views are taken into account.
4. Children are involved in decision-making processes.
5. Children share power and responsibility for decision-making.

Each level of the model focuses on three stages of commitment: openings, opportunities and obligations. An opening is a personal commitment to work in a certain way. An opportunity is where an organisation makes available resources to meet the needs in a certain way. An obligation is established when the organisation builds in a certain way of working, for example enabling a certain level of children's participation. The detailed model, shown in Figure 2.4, is made up of simple questions which determine the current position and help to identify next steps to increase children's levels of participation (Shier, 2001).

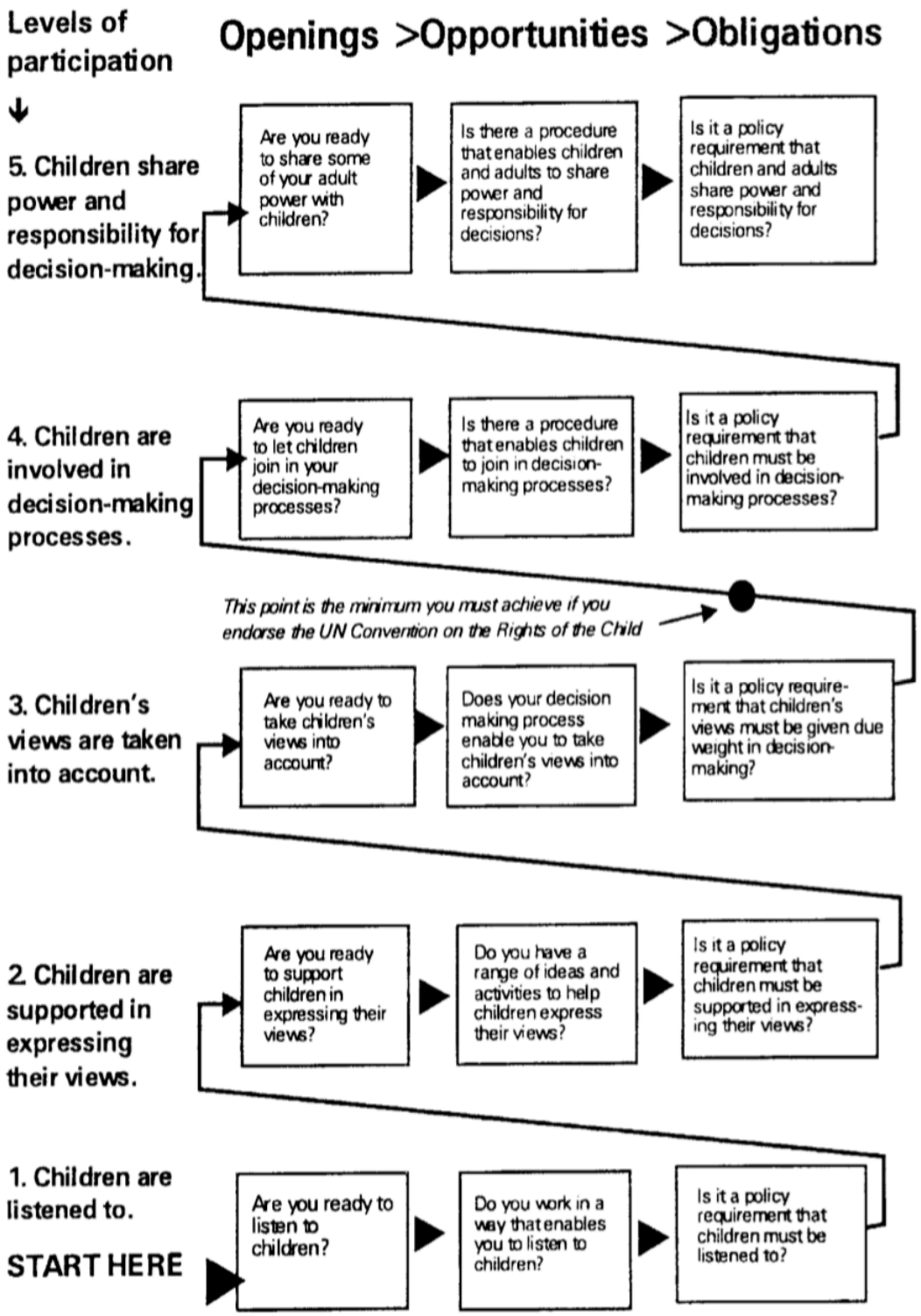

Figure 2.4: An image representing Shier's (2001) Pathways to Participation model.

This model serves to act as a useful tool for individuals, teams and organisations working with children. It can be a helpful first stage in developing an action plan to enhance children's participation in the decision-making process relating to matters that

concern them, for example education policies (Shier, 2001). Both this model and Hart's (1992) Ladder of Participation model have been criticised on the basis that the processes privilege the emotionally literate, those willing and able to articulate their thoughts (Davies, 2007). It is suggested, therefore, that when considering how to enhance children's participation, professionals are mindful that policies and practices will impact children in different ways. Consequently, children may require time and opportunities to share information with adults, creating a flow of knowledge (Davies, 2007).

The models in Figures 2.3 and 2.4 offer the opportunity for organisations involved in making decisions about post-16 education and training opportunities to examine their role in promoting the participation of children and to consider how policies may affect children differently. More importantly, these processes may enable policymakers to produce action plans to promote children's participation in the decision-making process, creating a shared and detailed understanding of children's needs post-16.

When using these models to critically evaluate the current findings in the literature relating to children being heard and involved in decision-making regarding post-16 educational policies and practices, it could be said that the voices of children have not been represented and assumptions have been made about their views. For example, Widdowson (2018) states that a significant number of children report that their educational and training needs post-16 are unmet and their voice is largely unheard. Lawy and Diment (2009) report that historically many policies in England had been predicated on a set of assumptions about children and their needs, instead of a representation of their views. Moreover, Chamberlain, Golden and Bergeron (2011) suggested that the government and those with power and influence infrequently ask children their opinions or wishes regarding educational pathways and provision. They suggest that often decisions are made by people who have little contact with the day-to-day running of education systems (Children's Commissioner, 2011). Bearing in mind these findings, it could be suggested that policymakers do not promote children's participation in the decision-making process, perhaps residing at the manipulation phase of Hart's (1992) Ladder of Participation model. Furthermore, when considering Shier's (2001) Pathways to Participation model, it could be said that children are not being given the opportunity to exercise their right to be heard nor are they supported

by effective policies or practices within organisational structures to exercise their right to be involved in the decision-making process. If policymakers, politicians and post-16 providers do not understand how policies and practices affect children differently and furthermore make assumptions about their beliefs regarding post-16 eductaion and training opportunities, it may be difficult for them to achieve their aim of meeting the needs of all children. It could, therefore, be said that whilst children have the right to be heard, the capacity to make decisions and the right to be involved in the decision-making process, these rights have not perhaps been realised.

This raises the question of whether compelling children to stay in education post-16 is the right choice. The freedom of choice regarding remaining in education after the age of 16 has also been debated by many. Spielhofer et al. (2007) suggests that children should be encouraged to participate of their own free will as opposed to operating a system of sanctions for those who refuse to participate. This point was also affirmed by Villeneuve-Smith, Marshall and Munoz (2007) in a study exploring the views of parents and children on raising the school leaving age. The study found that 50 per cent of teenagers were in favour of raising the leaving age; however, 71 per cent were also in favour of retaining their right to stay in or leave education post-16. Additionally, Lawy and Diment (2009), whilst exploring the views of 155 children regarding post-16 education and training, found that children in jobs without training felt that leaving education and entering the workplace allowed them to make a fresh start. Moreover, some felt that attending education and training post-16 led to a pointless cycle of unwanted training which may not lead to employment. Ultimately, for some children, leaving education at 16 may be meaningful and an economically rational decision (Wright, 2005). The DfE is currently consulting with the public to understand what they can do to give children clearer choices based on their career aspirations (DfE, 2019).

Wright (2005), when seeking the views of children aged 14 to 19, found that the majority of children make decisions about post-16 by year 10, with a minority making decisions in year 11 just before they leave. It would, therefore, seem fitting to capture the views of year 10 and 11 pupils (KS4) *at the point at which they are making decisions about post-16 education and training*. This study, therefore, seeks to specifically explore the views of KS4 pupils in the hope that gaining an understanding of their views can open up channels of communication between children and

policymakers, fulfilling their right to be heard and involving them in the decision-making processes relating to post-16 education and training. It is also acknowledged that capturing the views of pupils currently participating in post-16 education and training maybe problematic if children have chosen to disengage and are not compelled to remain in education or training via punitive measures.

2.9 Methodologies Used to Capture Pupils' Views

There are several ways to capture people's views. In the field of research, qualitative methods often attempt to answer questions about the experiences, meaning and perspectives of the participants. Qualitative methods may include focus group discussions, semi-structured interviews, in-depth interviews or analysis of texts and documents (Hammarberg, Kirkman, & De Lacey, 2016). Another methodological approach used to capture people's views is Q methodology. This is considered a robust method for measuring a variety of attitudes within a specific area (Cross, 2005).

Q methodology offers an innovative way of approaching qualitative analysis through the quantification of subjectivity – objectively studying subjectivity. This brings a scientific framework to the elusiveness of subjectivity (Coogan & Herrington, 2011). This methodology reveals the views extant among a group of people holistically (Watts & Stenner, 2005), directly comparing participants' responses in a consistent manner (Webler et al., 2009), allowing for both *subtle* and *major* differences to be highlighted (Coogan & Herrington, 2011). This means that Q methodology is able to offer something that other qualitative methods cannot: access to a wider variety of views (Webler et al., 2009).

There are a number of research papers that have utilised Q methodology to capture views within education. For example, researchers have elicited the views of teachers on citizenship education (Anderson, Avery, Pederson, Smith, & Sullivan, 1997); the views of young people on going to university (Bradley, 2007); the views of teachers on strategies to prevent school exclusion (Hallam, 2014); and the perceptions of educational professionals regarding the reintegration of excluded pupils (Armstrong, 2017). Q methodology is primarily an exploratory technique: it cannot prove hypotheses. It can, however, bring a sense of coherence to research questions that

have many, potentially complex and socially contested answers (Stainton Rogers, 1995). Fundamentally, Q methodology asks participants to decide what is 'meaningful', what does and what does not have value and significance from their perspective. This suggests that Q methodology may be a helpful approach to capture the views of pupils regarding post-16 education and training, which according to the literature and research presented in this chapter is a complex issue, socially contested by some.

Q methodology will be explored in more detail in chapter 3.

2.10 Summary of the Narrative Literature Review

The literature review has so far set out that academic engagement post-16 is seen to be important in increasing opportunities in later employment (Bono & Galindo-Rueda, 2006; Bynner, 2004; Iannelli & Paterson, 2005). The review has also documented how this perception has, over time, led to an increase in the age of participation in education and training to 18 – the objective of most recent legislative changes in this regard being to support and promote the outcomes and future employability of all children (DfES, 2007a). It was noted, however, that evidence supporting this increase in the age of participation in education is drawn from a limited international research base (Spielhofer et al., 2007). The review has also acknowledged the potential difficulties this may present, for example a lack of suitable educational pathways for children.

Children are seen as having the capability to make important decisions (Mental Health Act, 2005), the right to be heard (UNCRC, 1989) and the right to be involved in the design of educational provision to find practical solutions (DfE and DoH, 2014; McLarty & Moran, 2009). Despite this, it is suggested that children's voices are often unheard (Widdowson, 2018), their participation in decision-making is limited (Hart, 1992; Lawy & Diment, 2009; Shier, 2001) and policymakers and organisations have made assumptions about their beliefs and do not have a clear understanding of how policies and practices may impact children differently (Davies, 2007).

Capturing the views of children and ensuring they are actively involved in the decision-making process alongside policymakers may help to shape any reforms to post-16 provision (Children's Commissioner, 2007) and to promote opportunities in a rapidly changing global economy (Bono & Galindo-Rueda, 2006). This seems most pressing given the suggestion that secondary-aged pupils find it difficult to match their aspirations to post-16 education pathways (Bloomer & Hodkinson, 1997), the recent rise in people who are NEET at 18 (ONS, 2019) and recognition by LAs of post-16 provision being insufficient to meet the needs of all children (Bradford Council, 2015).

2.11 Systematic Literature Review

2.11.1 Outline of systematic literature reviews

A systematic literature review aims to provide a robust summary of reliable evidence in response to a particular question or set of questions. Systematic literature reviews adhere to a set of scientific methods that aim to identify, appraise and synthesise relevant research in a clear and transparent way to limit bias. The suitability of each research paper is determined by presenting a detailed summary of any methodological problems or bias that may affect the study and, in turn, the findings and the reviewer's conclusions (Petticrew & Roberts, 2006).

Methods for systematically reviewing *quantitative* research are well developed, often focusing on the effectiveness of certain interventions, for example randomised controlled trials. This method has, however, sometimes been criticised for focusing *too heavily* on experimental studies, reducing vast amounts of papers to smaller quantities and overlooking key findings (Andrews, 2005).

The synthesis of *qualitative* research is, in contrast, an emerging field and is increasingly considered to represent a valuable alternative approach (Thomas & Harden, 2008). Nevertheless, the procedure for the systematic review of qualitative research is less developed with no clear consensus yet on the best method available (Petticrew & Roberts, 2006).

In this study there is a focus on capturing views. Research of this kind can yield a range of quantitative and qualitative studies which may be too heterogeneous to follow a traditional quantitative systematic approach. Harden et al. (2004) adapted qualitative

analysis techniques, typically known as meta-ethnography approaches, to support the systematic review of studies that include both qualitative and quantitative studies focusing on people's views. The systematic literature review here will utilise this approach, which will be explored in more detail in the method section (2.11.3) of this chapter.

This systematic literature review aims to identify, critique and synthesise existing research papers relating to secondary-aged pupils' views on post-16 education and training. Robson and McCartan (2016) suggest that worthwhile research requires knowledge and understanding of what has been done before so as not to repeat the work of others. The researcher undertook this systematic literature review to justify the rationale for this research and bring focus to the research question. The systematic literature review described below looks closely at how secondary-aged pupils' views regarding post-16 education and training have been explored and described. The systematic literature review will begin by presenting the review questions.

2.11.2 Review questions

A. What existing research has explored the views of secondary-aged pupils regarding post-16 education and training?
B. Within this existing research, what are the views of secondary-aged pupils regarding post-16 education and training?

2.11.3 Method

The approach utilised in this systematic literature review draws from a method employed by Harden et al. (2004) designed specifically for reviewing and synthesising research capturing the views held by people. The process starts with a scoping review utilising strict inclusion/exclusion criteria, followed by a deconstruction process in which studies are tabulated based on set criteria. From there an exploration of the similarities and differences between each study will be undertaken, facilitating theory-testing. The findings will then be reconstructed using these thematic concepts.

2.11.3.a Scoping method

To review the existing research, a scoping method was selected. Inclusion and exclusion criteria (Table 2.1) were identified to refine the search criteria, ensuring the inclusion of appropriate studies within the systematic literature review. The researcher made the decision to only include research from the UK, post-2000, to reflect the current social and political context as there have been many legislative changes within education historically. To reduce the risk of bias and increase the creditability of studies, only peer-reviewed papers were included, ruling out grey literature (Robson, 2011).

Inclusion criteria	Exclusion criteria
Secondary-aged pupils in the UK education system.	Not secondary-aged pupils in the UK education system.
Views, perceptions or viewpoints of post-16 education, decision-making regarding post-16 education and training post-2000 from peer-reviewed studies.	Not views, perceptions or viewpoints of post-16 education, decision-making regarding post-16 education and training. Pre-2000. Not peer-reviewed.

Table 2.1: A table to show the inclusion and exclusion search criteria.

Four databases were selected to conduct the searches: these were ERIC, OVID, Web of Science, and Google Scholar. The searches within these databases were restricted to peer-reviewed papers and access to full-text articles. A variety of search terms were employed using the Boolean operator 'AND' within each database to specifically answer the research questions (Table 2.2). Each search term was entered separately using a multi-search field criterion with a Boolean operator.

Concepts	Views	Post-16 education and training	Pupils	Key Stage 3 and 4
Synonyms	Viewpoints Perspectives Beliefs Perceptions Attitudes Opinions Outlook Standpoint	College Sixth form	Students Young people Children Teenagers Learners School-aged School pupils	Year 7 Year 8 Year 9 Year 10 Year 11
Broader terms		Further education		Secondary High school
Narrower terms				14, 15 and 16 years old
Related terms				School-aged School pupils School-based
Alternative spellings and variants				KS3 KS4

Table 2.2: A table to show the search terms and synonyms employed.

Once all search returns had been collated, duplicates were removed, and titles and abstracts were screened for relevance, applying the inclusion and exclusion criteria. Some full texts were accessed, and hand searches were conducted of the remaining included studies to identify any further studies. One additional study was identified and obtained by searching the title on Google Scholar (Appendix 1). A PRISMA flow chart (Moher, Liberati, Tetzlaff, & Altman, 2009; Figure 2.5) was adapted to document the search process and the total number of articles found at each stage of the scoping review.

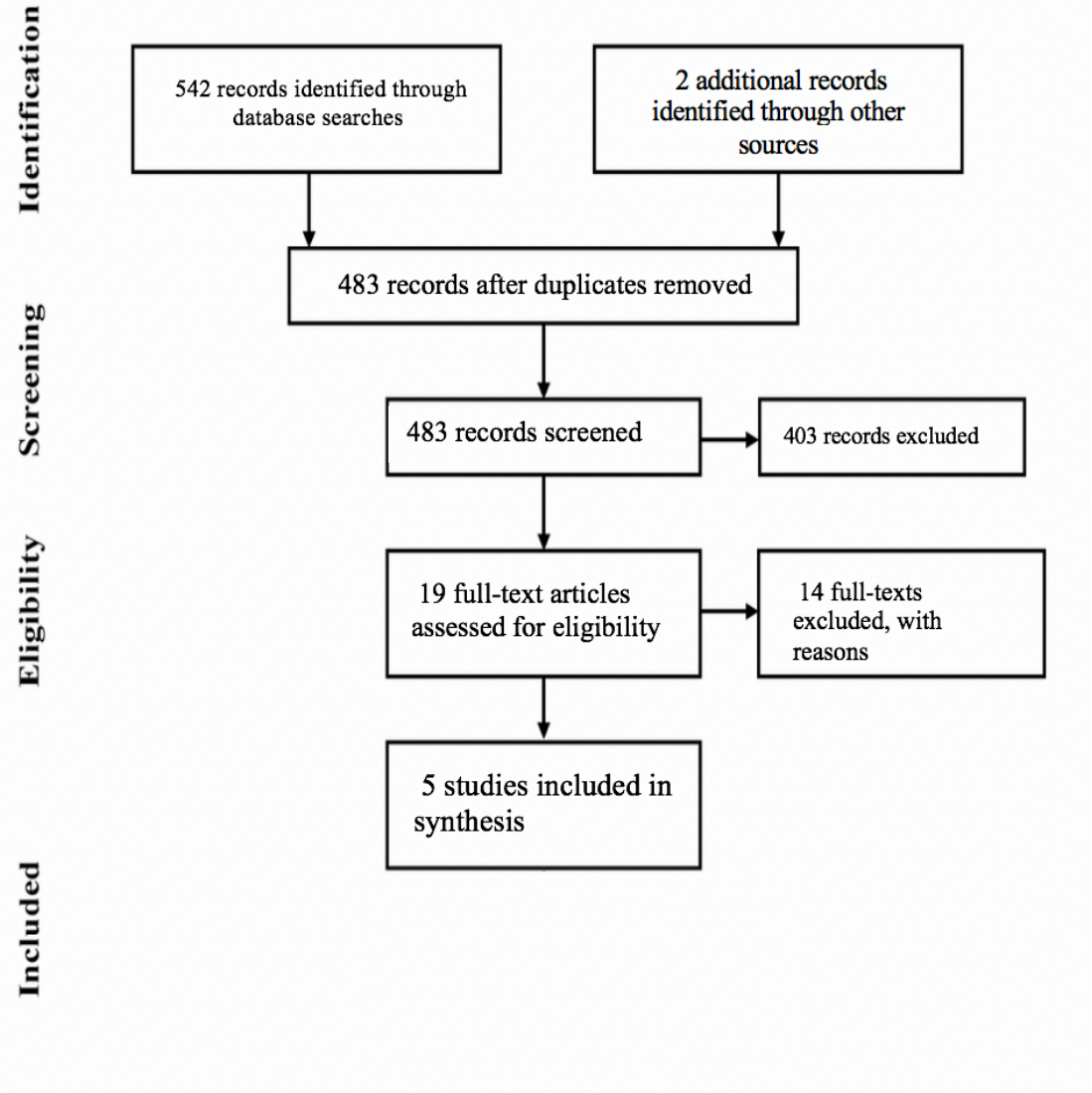

Figure 2.5: A figure to show the PRISMA flow chart (Moher et al., 2009) documenting the search process.

Of the 19 studies assessed for eligibility, 14 were excluded. The reasons for exclusion were as follows: not capturing secondary-aged pupils' views regarding post-16 and dated pre-2000 (Appendix 2). Of the five remaining studies, two were qualitative studies and three were mixed methods, purely quantitative papers were excluded on the basis that they did not meet the inclusion criteria.

2.11.3.b Quality assessment of studies

A quality assessment checklist was utilised to ensure the five remaining studies were of a high methodological standard (Harden et al., 2004; Table 2.3). Checklists are

designed to ensure that the studies under review include information about the context, participants, aims and research questions, and method of analysis. Checklists of this nature have been criticised for their use in qualitative research on the basis that researchers may contort their findings to fit with the criteria, paying less attention to the basic requirements of scientific rigour (Petticrew & Roberts, 2006). It can be argued, however, that quality assessment checklists provide an explicit framework for pinpointing strengths and weaknesses in each study (Harden et al*.,* 2004).

1	An explicit theoretical framework and/or literature review
2	Aims and objectives clearly stated
3	A clear description of the context
4	A clear description of the sample and how it was recruited.
5	A clear description of the methods used to collect and analyse data.
6	Attempts made to establish the reliability or validity of data analysis
7	Inclusion of sufficient original data to mediate between evidence and interpretation

Table 2.3: A table to show the Quality Assessment Checklist (Harden et al., 2004).

As shown in Table 2.4, salient data was extracted from the five remaining studies, and tabulated under a series of headings reporting the population, method of data analysis, and findings.

Study number	Author, date and country	Participants and sampling methods	Topic	Methodology/ data collection and data analysis (measures)	Key findings relating to the author's research question	Quality
1	Worth (2002) SW of England	303 secondary school year 11 pupils. Mixed-sex. Opportunity sampling.	Perceptions and attitudes of final-year students towards participating in temporary employment and post-16 education or training.	Quantitative survey using descriptive statistics. Five-point Likert scale set against statements relating to three research questions: 1. Do school leavers perceive an increased prospect of participating in	75 per cent of young people (YP) agreed that the more education you gain, the more jobs you can get. 77 per cent of YP agreed that high investment in education should lead to permanent employment. 80 per cent of YP agreed that if they had gained a lot of education they would not want temporary work. 41 per cent of YP disagreed with the statement 'there are plenty of jobs for people with no qualifications'.	1, 2, 3, 4, 5, 6, 7

				temporary forms of employment when they enter the labour market? 2. What are these young people's attitudes and expectations towards temporary working? 3. Could the incentive to gain education and training for employment be affected by the prospect of temporary working?	Females were more likely than males to agree with the statement 'higher levels of education would not necessarily facilitate being able to find secure jobs'. Pupils in the higher attainment group (A–C grades) ascribed more importance to the role of education and training in employability.	

2	Swift (2009) England and Antigua Unpublished thesis	Two mainstream secondary schools. Year 10 and 11 pupils at two schools in the North of England. Information from further education colleges was excluded based on the inclusion/ exclusion criteria.	Quantitative method explored pupils' perceptions of post-16 education and training. Qualitative method explored pupils' perceptions and understanding of post-16 education and training pathways.	UK context: 82 (47 female and 35 male) questionnaires completed by year 10 and 11 pupils and semi-structured interviews with 20 YP. Mixed methods approach. Quantitative – descriptive statistics. Qualitative – thematic/narrative analysis.	Pupils are concerned about money and status which a career or job earns them. Pupils take advice from parents, siblings and friends rather than from career advisors. Careers advice tended to be narrow in its focus. No attempt to encourage YP to take a broader perspective, to consider related careers. Vocational courses and qualifications do not carry the same apparent value as academic courses and qualifications. The majority of YP expect that school will provide them with the knowledge,	1,2,3,4, 5,6,7

					skills and attitudes required to get a job. Some pupils just wanted to be out earning money and, therefore, had no aspirations to undergo further training and ultimately obtain a better job. The majority of participants felt that obtaining academic qualifications was an essential factor in helping them to gain well-paid employment and, therefore, it was necessary to achieve high grades in school. The majority of pupils agreed that employers would recruit those who have higher grades. In the UK, those who were taking vocational courses such as BTECs or	

					GNVQs perceived that these were viewed less favourably than A-levels.	
3	Mannion (2002) Scotland	41 year 10 and 11 pupils.	Patterns of participation in post-16 education and training. Pupils' perceptions of the transition from compulsory to post-compulsory education.	Mixed methods approach. Qualitative – focus group. Quantitative – survey regarding pupils' influences, choices and factors. Data analysis: coding system (factors created), and descriptive statistics.	Top four factors affecting the transition for year 10 and 11 pupils to post-16 education and training: 17 per cent: school life/aspects of learning. Codes of conduct, ethos and atmosphere, curriculum and school timetable impact on decisions. 15 per cent: relations (the influence of family, neighbours and close partners). 22 per cent: exams results 27 per cent: career, job, work, money prospects.	1,2,3,4, 5,7

4	Davies and Biesta (2007)	Year 10 and 11 pupils accessing vocational courses in further education colleges.	Perceptions of vocational learning of 14- to 16-year-olds accessing Further Education (FE). Pupils enrolled on admin, IT, and hairdressing courses. Transition to FE within the period of compulsory education.	Qualitative. Semi-structured interviews. Six pupils from each cohort over two years of their course. Thematic analysis.	Pupils with a clear career pathway found the vocational course had a positive influence on vocational aspirations. Pupils' aspirations and interests were largely uninformed, shifting and variable during the two years of the course. Work experience, choice of course and changes in their lives outside of school affected pupils' views about their futures. Some pupils had chosen FE courses based on their negative experiences at school and a wish to try something else. Some pupils choose FE courses as it fitted with their aspirations.	1,2,3,4, 5,7

					Most pupils chose FE courses because of their desire to study differently and in a different environment to school.	
5	Blenkinsop, McCrone, Wade, and Morris (2006) England	165 pupils from 14 schools from seven local authorities. 85 pupils in year 9 (made decisions about GCSEs) and 80 year 11 pupils thinking about post-16 education, training or employment.	How pupils make educational choices at 14 and 16. The choices young people make at the end of Key Stage 3 about what to study during Key Stage 4. The choices young people make at the	Qualitative. In-depth interviews with 165 pupils from 14 schools. Follow up interviews, reflecting on decisions made (6 months later). Narrative accounts. Research questions focused on school context,	Pupils were influenced by their perception of a subject, for example the employment opportunities and earning potential. Pupils provided with careers education and guidance were more influenced by structural factors. Some pupils were influenced by friends, family and other external sources of influence, with friends being highly influential. Most pupils seemed to have thought through and been aware of the consequences of their decisions. Most considered the impact of their choices	1,2,3,4, 5,7

		Telephone interviews with 47 parents excluded under inclusion/ exclusion criteria.	end of Key Stage 4 about whether to continue in education.	school effectiveness, and careers education and guidance provision for each case study.	on their futures, for example career opportunities. When pupils felt supported in decision-making by the school, they were more influenced by school factors (such as individual talks with teachers and the careers education and guidance provision) and less reliant on external factors such as friends and family. Pupils valued having sufficient time to make choices, the opportunity to have individual conversations with teachers to discuss their options, and detailed, clear and impartial information on courses and pathways so that they could make informed choices. Pupils made decisions in different ways. The quality of their decisions	

					seemed to vary according to context, for example the curriculum offer and support mechanisms, how information and advice were being mediated to them, and their approach to and skills in decision-making. Pupils brought different mindsets to the decision-making process and made decisions differently across and within schools. Their decisions had also often fluctuated over time, even amongst students who had at first appeared very decided about their choices.	

Table 2.4: A table to show the five studies included in the systematic literature review.

Each study has been assigned a number to assist the cross-referencing process throughout the reporting of findings. All studies met the majority of the quality assessment criteria and, therefore, no studies were excluded on this basis. Of the five studies, all included the views and perceptions of pupils from year 9 to 11 regarding post-16 education and training. One study explored the views of year 10 and 11 pupils accessing vocational college courses early. All studies were conducted between 2002 and 2009.

2.11.3.c Thematic synthesis

To synthesise and reconstruct the findings in each of the five studies, a thematic synthesis was undertaken following the approach adopted by Harden et al. (2004) and detailed in Thomas and Harden (2008). This approach is based on thematic analysis and meta-ethnography approaches, allowing for consideration of people's views, thereby fulfilling the aim of the systematic literature review. This method identifies key concepts from studies and translates them into one another, offering novel interpretations (Thomas & Harden, 2008).

The first step in thematic synthesis is to complete a line-by-line extraction, pinpointing sentences and phrases that are relevant to the research questions. Each sentence or phrase is assigned one or more initial codes to translate the concepts. Each code is then revisited, following the grounded theory technique of axial coding involving inductive and deductive reasoning, to achieve consistency in the coding (Thomas & Harden, 2008).

The following 24 initial codes were generated:

- Further education has a high value in terms of employability.
- Investment in further education should lead to permanent employment.
- Qualifications, per se, may not always lead to employment.
- Higher qualifications obtained in further education may not always lead to employment.
- Career aspirations and interests may change, making decision-making after year 11 difficult.
- Work experience supports decision-making post-16.

- Further education offers an opportunity to undertake real work.
- Vocational courses can support the process of a young person seeking employment in their chosen career.
- Academic qualifications are seen as superior in further education.
- Academic subjects are superior to vocational subjects in further education.
- Choices of courses are not always available post-16, hindering pathways to a young person's chosen career.
- Aspirations play a vital role in decision-making post-16.
- Courses selected post-16 based on aspirations may limit options when seeking employment.
- Selecting a variety of options post-16 opens up opportunities for employment.
- A lack of clear aspirations makes it difficult to make decisions about post-16 opportunities.
- Parents and friends influence decision-making post-16.
- Careers advice may not be sufficient to support decision-making regarding post-16 opportunities.
- Further education prepares young people for employment.
- Employment opportunities influence decision-making regarding post-16 opportunities.
- Careers support and guidance has a positive impact on decision-making regarding post-16 opportunities.
- Careers advice and support is a vital part of the decision-making process regarding post-16 opportunities.
- The post-16 opportunities available impact on decision-making.
- Qualifications obtained influence the choices available post-16.
- Post-16 education and training opportunities may not suit everyone.

The next step is to look for similarities and differences between the codes and to group them hierarchically. This creates overarching themes, capturing the meanings of groups of initial codes (Thomas & Harden, 2008).

This step led to the generation of three descriptive codes:

- individual aspirations, skills and interests;

- societal values;
- familial expectations and systemic factors.

There is a third step in the thematic synthesis in which analytical codes are generated, 'going beyond' the content of the original studies. This involves creating more abstract themes that consider the implications of the views concerning an intervention or policy (Thomas & Harden, 2008). As the descriptive codes generated in step two of the thematic synthesis in this review were considered relevant to the research questions (Appendix 3), it was not felt necessary to conduct the third step of the synthesis. This allowed the descriptive codes to remain close to the findings in the original studies.

2.11.4 Findings of the systematic literature review

The three descriptive themes generated through the thematic analysis have been used as subheadings to structure the discussion documenting the commonalities between the studies. The studies are referred to by the numbers assigned to them in Table 2.4. These numbers will be used throughout this discussion as a means of cross-referencing.

2.11.4.a Individual aspirations, skills and interests

The majority of papers implied that children's views of post-16 education and training opportunities were related to their aspirations, skills and interests (Papers 2, 3, 4 and 5). It was suggested that aspirations guide a person's future career path and, therefore, the decisions they make regarding the suitability of post-16 education and training. In addition, it was proposed that not having clear aspirations may lead to pupils feeling confused, frustrated and unsure about post-16 opportunities, impacting on the decisions and choices they make after year 11 (2, 3, 4 and 5). For example, it was found that children often select a variety of courses in post-16 to ensure their options remain open to a variety of employment pathways, acting as a plan B or back-up plan (3).

On the other hand, it was recognised that having aspirations and a career goal may restrict a young person's perception of post-16 opportunities, leading to the selection of specific courses that may hinder their opportunities to seek employment or further

education outside of their interests. In two papers, children reported that their aspirations and interests may change over time, later impacting on the suitability of course selections in post-16 education and training (3 and 4). In one paper, children were re-interviewed six months after their initial interview and some shared that, once enrolled on the course, their career pathways were not as clear as they once thought, perhaps due to a dislike of the subject area (5). In another study, children were tracked over two years following early enrolment on to a further education college course; some children found the decisions they made about college courses confirmed that they did not want to follow that career path (2).

The skills acquired by pupils, that is, the qualifications they were expected to gain in year 11, also influenced their views about post-16 opportunities. In one paper, 22 per cent of year 10 and 11 pupils suggested that high grades increase opportunities available within post-16 education and training (5).

2.11.4.b Societal values

Collective perspectives relating to the perceived value of education and training opportunities post-16 were frequently cited, for example the 'more education you gain the more jobs you are likely to get' (papers 1, 2 and 3). The prominent perspective in these papers suggests that 'engaging in further education has a high value in terms of employability'. One paper exploring the views of year 11 pupils regarding post-16 provision cited the view that 'investment in further education should lead to permanent employment' (1). In another paper, children expressed the opinion that society deems it essential to obtain higher qualifications in order to gain well-paid employment. Children specifically perceived university degrees as being highly valued by society as a means of preparing young people for employment (3). Another societal view documented in this paper states that academic qualifications in further education are seen as superior to vocational qualifications, notably by employers (3). Divergent views were also evident: for example, female pupils shared the view that investment in further education and obtaining higher qualifications may not always lead to finding and securing permanent employment (1).

2.11.4.c Familial expectations and systemic factors

Familial expectations, along with systemic factors, were also frequently cited in discussions relating to post-16 education and training opportunities. A few papers indicated that parents and friends were felt to influence pupils' views regarding post-16 education and training (papers 3, 4 and 5). More specifically, it was indicated that the actions of peers would influence pupils' views and decisions regarding post-16 education and training courses (3).

A number of systemic factors were identified. In two papers, children reported that employment opportunities in the labour force and earning potential influenced their chosen career path and their views of post-16 education and training opportunities (4 and 5). One paper noted the importance of work experience opportunities post-16, that is, being afforded the opportunity to undertake 'real work' whilst undergoing training (2). Some children in this study viewed the availability of vocational courses as important in supporting them to seek future employment. Another paper found that some children viewed personal contacts in the workplace as important in securing future employment (5). Children in two of the studies reported that suitable courses were not always available and that the ethos of the sixth form or further education college did not suit their needs, interests and beliefs (3 and 5).

The availability and suitability of careers advice was also explored in two of the papers. One paper indicated that children viewed careers advice, support and guidance as playing a vital role in shaping their views and the subsequent decisions they made regarding post-16 education (4). Another paper reported that general careers advice was not felt to be adequate to support the decisions children were making about post-16 education and training opportunities as they were unsure about what was available (3).

2.12 Summary of the Systematic Literature Review and Rationale

The findings from the systematic literature review demonstrate the various views held by children regarding post-16 education and training and imply that a variety of factors may be influencing both these views and the decisions children make about post-16 education and training opportunities. Some of these views also appear to differ

significantly from those noted in the 2007 Green Paper 'Raising Expectations: staying in education and training post-16', outlining the assumptions made by policy-makers about children's views. This provides strong evidence of the need to better understand how such a heterogeneous group of pupils *view* post-16 education and training opportunities, and suggests that such knowledge will be important in informing future policy development and the design of optimal post-16 provision.

This research may also be seen as the first step in fulfilling a child's right to be involved in the decision-making process – indeed, it seems of vital importance given that all children are now *required* to stay on in education or training until the age of 18.

It may be, of course, that children hold views that differ from prominent or assumed societal views, and it is certainly likely, within the population of secondary-aged pupils, that a range of conflicting views are held on the matter. This may suggest that certain views are hidden beneath a widely held dominant view and, as a result, further examination is required. This would, of course, have significant implications for the local post-16 education and training providers designing local provision and supporting children transitioning into post-16. Understanding the nature of such *viewpoints* will therefore be greatly beneficial.

The literature review and systematic literature review identified a small number of studies capturing the views of secondary-aged pupils, highlighting a gap in the research. The systematic literature review also found that the most recent research study of secondary-aged pupils' views regarding post-16 education and training was undertaken in 2009, that is, well before the recent significant legislative changes.

The findings summarised in this review, in the context of the rise in the age of compulsory participation in education and training instigated in 2015, essentially provide a very clear rationale for investigating the views of secondary-aged pupils on the matter.

The research, therefore, seeks to explore the views extant among the KS4 population as a whole regarding post-16 education and training opportunities, with the hope of informing local post-16 provision and policies by addressing the following question:

What are the viewpoints of Key Stage Four pupils regarding post-16 education and training opportunities?

3. Methodology

3.1 Introduction to the Methodology

This chapter aims to provide a detailed overview of Q methodology as a research approach to explore the views of KS4 pupils regarding education and training opportunities after year 11. It will examine the rationale behind the selection of Q methodology as a suitable research method for this study and discuss the procedure followed and necessary considerations. The chapter will be divided into the following sections:

- Origin and Aims of Q Methodology;
- Ontological Position, Epistemological Standpoint and Reflexivity;
- Q-methodological Procedure;
- Other Research Designs Considered;
- Procedure for This Study;
- Quality Criteria for Q Methodology;
- Ethical Considerations;
- Research Schedule; and
- Summary of the Methodology.

3.2 Origin and Aims of Q Methodology

3.2.1 Aims of Q methodology

Q methodology aims to bring clarity to highly complex and socially contested topic areas. Q can be defined as a modern alternative methodology which attempts to hear the range of voices that exist within a population by systematically identifying shared understandings of certain social groupings (Stainton Rogers, 1995 Watts & Stenner, 2005). The approach aims to reduce the imposition of the researcher by empowering the participants to express their views in a meaningful way, revealing variations in the views held by participants and inviting the views of those on the margins (Hughes, 2017). Q methodology appears to satisfy the aims of this research in that it proposes to capture the views of a particular social grouping, revealing common and divergent

viewpoints, and perhaps uncovering viewpoints that differ from those represented in the literature.

3.2.2 Origins of Q methodology

Q methodology was developed by William Stephenson in 1935 as an adaptation of Spearman's method of factor analysis. Spearman's factor analysis examines the relationships, or more specifically the correlations, between identified variables. Factor analysis (also known as R methodology) is useful when making comparisons between set variables, for example height and weight. However, it does not allow for comparisons to be made *between people* across a number of variables (Watts & Stenner, 2012).

Stephenson adapted Spearman's method of factor analysis by using participants as the variables and comparing the ways in which they make sense of a group of items. This is known as a by-person factor analysis. Participants are asked to rank statements known as the 'Q-set' in terms of how much they agree or disagree with them. This leads to the creation of a completed Q set which constitutes a person's current point of view regarding a specific topic area. Therefore, a completed Q sort becomes a variable (Watts & Stenner, 2012). Q methodology is an inversion of R methodology: participants in Q methodology are actively involved in the process, whilst participants in R methodology are passive (Stainton Rogers, 1995).

Q methodology grew out of Stephenson's frustrations with R methodology and its failure to examine key differences at an individual level, along with his interest in human expression. Stephenson (1935) referred to human expressivity as 'operant subjectivity'. Operant subjectivity can be defined as the views held by a person that are subjective and self-referential. Subjectivity is 'operant' in the sense that it does not exist as an aspect of the mind, but rather as an expression or behaviour that is best understood as being influenced by environmental factors. This notion is based on the principles of behaviourism in that behaviour – in this case 'subjectivity' – is produced and omitted as a result of an interaction with the immediate environment (Watts & Stenner, 2012). Therefore, 'subjectivity' is best understood in operant terms as the sum of behavioural activity that constitutes a person's 'current point of view' (Watts &

Stenner, 2012, p. 26). This suggests that subjectivity is not a state of mind, but rather an expression of an activity which can be captured.

The strength of Q methodology is that it combines qualitative and quantitative approaches into a research method that systemically studies 'subjectivity', bringing an objective lens to subjectivity (Brown, 1980; Watts & Stenner, 2012). Unlike traditional scientific methods which serve to verify prior knowledge and theories, Q methodology opens the door to new discoveries. Q methodology allows participants to discern their general position on a subject by capturing their Q sort and labelling this as a variable. These variables are then statistically examined to reveal correlations, creating collective viewpoints known as common factors (Watts & Stenner, 2012).

3.2.3 Applications of Q methodology

Historically, Q methodology has failed to be recognised or understood as a contemporary alternative methodology in the field of psychology. Despite this, in recent decades there has been a reintroduction of Q methodology into the field of psychology through the research into health and childhood issues conducted by Stainton Rogers in 1991 and Stainton Rogers in 1995. This breakthrough has led to the publication of numerous Q research studies over the past two decades in a range of academic fields, including chronic pain, childhood studies and human geography (Stenner, Watts & Worrell, 2008).

In the field of educational psychology, Q methodology has been utilised to capture the voices of children and young people both on an individual (constructivist) and group (constructionist) level (Hughes, 2017). In one research paper, Hughes (2017) documented how Q methodology can be used to capture the views of primary- and secondary-aged children and how such views can be incorporated into the design of interventions or reports aimed at improving their educational outcomes. Q methodology has also been used in education to capture the views of post-16 young people regarding going to university (Bradley, 2008). This suggests that the possible applications of Q methodology are endless (Watts & Stenner, 2012).

Furthermore, Q methodology is said to be the mathematical equivalent in psychology of quantum mechanics. In Q methodology, the data is scrutinised using factor analysis, which employs the same mathematical approach as quantum theory – a proven scientific framework (Brown, 1980; Watts & Stenner, 2012).

3.3 Ontological Position, Epistemological Standpoint and Reflexivity

Ontology is concerned with the nature of social reality and the researcher's beliefs about the nature of reality (Robson, 2011). Ontology determines the epistemological standpoint, which can be defined as the knowledge of social reality with regard to the question 'How and what can be known?' (Blaikie, 2010).

The researcher's ontological position with regard to the current research is that of a 'critical realist'. A critical realist believes that a single reality exists, but that this reality can only be known imperfectly: things can neither be proven or unproven. Critical realists believe that the world is complex and multifaceted; facts can be disputed and reality may be interpreted differently (Burr, 1998). Critical realism aligns with post-positivist ideas and concepts. Post-positivism was born out of a dissatisfaction with the positivist realm where general laws were formed on the basis of observing a pattern and seeking to justify a truth as opposed to falsifying it. While both positivism and post-positivism consider there to be a single reality, where cause and effect exist, post-positivism denies the basis of such truth seeking, instead bringing a critical lens to the truth. Post-positivism acknowledges that the subject matter of social sciences are people, who attach their own meaning to events that occur around them. It recognises that people hold an inner world of ideas, meaning and motivations impacting on what they do. Positivism and post-positivism are both committed to seeking an objective truth. However, post-positivism seeks to identify the possible effect of bias, for example the values of the researcher (Robson & McCartan, 2016).

The mixed methods approach of Q methodology sits well within a critical realist ontology in that it aims to explore the subjective nature of knowledge by applying a statistical and systematic approach to the elusive nature of subjectivity (Brown, 1980; Fleetwood & Ackroyd, 2004). Q methodology recognises that humans may have an idiosyncratic view of the topic area; however, it is accepted that in a collective sense

only a finite number of viewpoints will ever exist regarding a specific topic area (Watts & Stenner, 2012).

The researcher's epistemological stance is social constructionism, adopting the idea that knowledge and meaning are socially constructed by people as they engage and interact. Another term that is sometimes used interchangeably with social constructionism is constructivism; however, there are marked differences between the two. Constructivism explores how a person individually construes and makes sense of the world, whereas social constructionism explores how people create shared constructs of the world in relation to a specific area of interest *through social interactions*. A social constructionist approach leads to the creation of fluid social constructions between the researcher and participants as opposed to firm facts (Robson & McCartan, 2016).

Q methodology lends itself to a social constructionist standpoint as it accepts that people hold similar viewpoints due to shared experiences and contexts. Q methodology seeks to identify these shared viewpoints (Watts and Stenner, 2012). This aim mirrors that of the research: to explore the viewpoints of KS4 children who may hold similar views due to shared experiences and contexts. Social constructionism also underpins the theory behind Q methodology: the production of factors (shared viewpoints) are categorised as an expression of an activity, shaped by the environment and context people exist within (Watts & Stenner, 2012). The mixed methods nature of Q methodology adopts a social constructionist standpoint, acknowledging that the production of knowledge is a social practice. It also adds a realist, positivist element by critically evaluating social phenomena as a way to understand and explain it (Sayer, 1992). A social constructionism standpoint therefore complements the critical realist ontology, offering an additional layer of interpretation to subjectivity to ensure it is fully researched (Hacking, 1999).

In research it is now commonly accepted that 'objectivity' can never be truly achieved, as any patterns emerging in the data will be in line with the researcher's presuppositions, beliefs and experiences. It is therefore important for the researcher to acknowledge and note down their beliefs, experiences and hopes relating to the research topic. One way to do this would be for the researcher to adopt a reflexive

approach. Reflexivity can be defined as incorporating the awareness that a researcher's subjectivity influences the findings produced (Wijngaarden, 2016). In order to remain reflexive, the researcher made a record of her own views, values and opinions and completed the Q sort used in this study (Appendix 4). It is hoped that this will support the reflection process and help to make transparent her views of education and training opportunities after year 11. Q methodology supports reflexivity by allowing for the exploration of the researcher's views, bringing to the process clarity, transparency and reflection on the part of the researcher (Wijngaarden, 2016).

3.4 Q-methodological Procedure

The Q-methodological procedure typically adheres to a structure made up of the following five stages, as outlined by Van Exel and De Graaf (2005):

- definition of the concourse;
- development of the Q-set;
- selection of the P-set;
- administering the Q sort; and
- factor analysis and interpretation.

3.4.1 Definition of the concourse

The concourse in Q methodology can be described as the collection of all the possible items, which may be statements, words, pictures or traits, that constitute individual expression relating to a particular interest area (Van Exel & De Graaf, 2005). Brown (1993) defines the concourse as the flow of communicability surrounding any topic. Typically, and indeed in this study, these items are 'statements' about the topic area (Watts & Stenner, 2012).

The concourse should be broadly representative of the focus topic and, therefore, should represent the relevant population of opinion, covering all ground (Watts & Stenner, 2012). It is suggested that statements can be drawn from an eclectic range of sources, for example printed or published sources, such as journal articles, research, newspapers, blogs or policy documents, and other sources, such as interviews and focus groups (Van Exel & De Graaf, 2005; Watts & Stenner, 2012).

3.4.2 Development of the Q-set

Once the concourse has been established, a subset of statements is selected from it to create the Q-set (Van Exel & De Graaf, 2005). The Q-set aims to form a representative account of the concourse. A Q-set typically consists of between 40 and 80 items (Brown, 1993), with the final number varying depending on the topic of interest. It may be necessary in some circumstances, for example when working with children, to employ a more limited number of items in the Q-set to make the process less taxing. In such cases, it is important to ensure that the phrases or words used in the Q-set cover the topic area in a more general fashion (Watts & Stenner, 2012).

Developing the Q-set is said to be the most time-consuming stage of Q methodology. A skilled manner and a rigorous approach are required to ensure that the Q-set provides a good representation of the wider concourse (Watts & Stenner, 2012). There are a number of ways to approach this stage of the process, and the approach taken often varies between researchers (Zabala, Sandbrook & Mukherjee, 2018). Watts and Stenner (2012) recommend two ways of refining the concourse to create the Q-set; these are known as unstructured and structured approaches. A structured approach typically employs either an inductive method, where themes or patterns emerge from the concourse, or a deductive method, where hypotheses or theories are proposed in advance. An unstructured approach differs in that the researcher defines their own parameters as they become increasingly familiar with the topic area. However, this approach may be more time-consuming and may increase the pressure to be rigorous and exhaustive. The unstructured approach may also be susceptible to researcher bias through the over-representation of certain topic areas (McKeown & Thomas, 1988).

It is recommended when refining and reducing the concourse to the Q-set, to pilot the Q-set. Sexton et al. (1998) suggested several ways to do this, for example asking colleagues or others conducting research in the area of interest to refine the concourse in to the Q-set, or asking a small number of participants to pilot the Q-set by sorting the statements and then asking for their interpretation of the items.

The Q-set should be accessible to all participants, avoiding the use of technical or complicated language (Watts & Stein, 2012), and should comprise a set of natural-

language statements that represent the wider concourse. It is essential that the Q-set is constructed in a way that enables the participants to successfully express their viewpoint and therefore successfully answer the research question (Watts & Stenner, 2012).

3.4.3 Selection of the P-set

The P-set refers to the participant group within a Q methodology study. When considering participant numbers in a Q methodology study, it is suggested that a different approach is adopted to that used in R methodology studies. Unlike an R methodology study, where a high number of participants is required to demonstrate generalisation, a Q methodology study aims to establish the existence of viewpoints, and particularly to understand, draw out and compare these viewpoints (Watts & Stenner, 2012). Therefore, in a Q methodology study, the number of participants should be minimised to prevent patterns in the data being concealed by an overly large P-set (Watts & Stenner, 2005). The number of participants in a Q methodology study varies: typically the P-set ranges from 40 to 60 participants (Van Exel & de Graaf, 2005). The rule of thumb suggests that the number of items in the Q-set typically dictates the number of participants required. It is recommended that a ratio of one participant to two statements from the Q-set is followed: for example, in a 60-item Q-set, 30 participants are required (Watts & Stenner, 2012).

As the participants in a Q methodology study act as the variables, careful selection of participants is required to ensure that the P-set reflects enough diversity among perspectives in the wider group. On this basis, the use of strategic sampling techniques (as opposed to opportunistic sampling techniques) is advised. It is accepted in Q methodology that only a finite range of viewpoints will be found – this being limited by various environmental constraints (Willig & Stainton Rogers, 2008). It is recommended that participants are selected on the basis that they have a defined viewpoint on the topic area and that their viewpoint matters in relation to the area of interest (Watts & Stenner, 2012). It is accepted that snowballing techniques may be utilised for practical reasons to ensure the desired number of participants are recruited (Watts & Stenner, 2012). Snowball sampling is a process whereby the current

participants are asked to recruit other potential participants through their contacts (Robson, 2011).

3.4.4 Administering the Q sort

The Q sort allows the participant to sort through a series of items from their subjective, first-person viewpoint. In essence, each participant sorts a set of statements (the Q-set) along a single, face-valid dimension such as 'most disagree' to 'most agree'. Participants respond to the 'condition of instruction', which relates to the research question (Watts & Stenner, 2012). The participants will be asked to sort their items on to a fixed-distribution grid in accordance with the condition of instruction, demonstrating their own perspective. The fixed-distribution grid, shown in Figure 3.1, provides a technical means for quantifying each item in relation to one another, allowing for each statement to have multiple meanings to the participants. This leads to multiple patterns of the completed Q sort and allows for the interpretation of emergent factors when undertaking data analysis and interpretation (Willig & Stainton Rogers, 2008).

The distribution grid follows a normal distribution curve where the majority of items will fall at the midpoint and fewer items at the periphery. A fixed-distribution or free-distribution grid can be selected. A fixed-distribution grid offers a convenient and pragmatic way of facilitating the ranking of statements for the participant and researcher. In contrast, a free-distribution grid allows the participants to sort the items using a personalised approach, which may be time-consuming and require interpretation between the participant and researcher (Watts & Stenner, 2012).

The shape of the distribution grid, or *kurtosis*, also requires consideration: for example, a flatter or steeper shape may be appropriate. It is recommended that a flatter *kurtosis* may be suitable for complex topic areas or for participants who have little knowledge of the topic area. A steeper *kurtosis* is more appropriate for participants who are likely to be more knowledgeable, allowing for fine-grained discriminations at the extremes of the distribution grid (Watts & Stenner, 2012). Brown (1980) suggests the use of a nine-point (−4 to +4) distribution for Q-sets of 40 items or less, an 11-point (−5 to +5) distribution for Q-sets of 40 to 60 items, and a 13-point (−6 to +6) distribution for Q-sets of 60 items and above. The midpoint, or zero value, is a neutral point of no

meaning and acts as a central point around which positive and negative salience distend (Watts & Stenner, 2012). It is suggested that it may be helpful to ask the participants to mark, using a line, the point at which they change from disagreeing to agreeing with the items (Webler et al., 2009).

A final important step in a Q study is a post-sort interview, which adds a qualitative element. This is seen as a way of gathering additional information, which may increase the richness and quality of the data. Post-sort interviews can be used as a means to pinpoint why participants may have assigned certain significance to certain items and to provide a wider understanding of the participants' beliefs, opinions and thoughts surrounding the area of interest. These may be undertaken in many different forms, for example a post-sort open-ended questionnaire (Watts & Stenner, 2012).

3.4.5 Factor analysis and interpretation

The analysis of the Q sorts follows a statistical and objective process involving factor analysis and interpretation, known as the objectification of subjectivity (Willig & Stainton Rogers, 2008). The extraction and interpretation of factors, when combined with post-sort qualitative information, give meaning to the data, enabling the identification of collective viewpoints relating to the topic area (Webler et al., 2009).

The data analysis and interpretation follow a particular process, as outlined by Watts and Stenner (2012), which is divided into the following stages:

- Factor extraction: The Q sorts are correlated, creating a 'correlation matrix'. This matrix represents the level of (dis)agreement between the individual Q sorts, in other words how (dis)similar the points of view represented in the participants' Q sorts are. The next stage involves drawing out Q sorts that are highly correlated and those that are not, creating 'factors'. This identifies how many different Q sorts are in evidence and the extent to which each Q sort is associated with each factor (Willig & Stainton Rogers, 2008). The data then undergoes further analysis using a range of statistical approaches to decide upon the number of factors to retain and rotate for further analysis.

- Factor rotation: The identified factors are then rotated to arrive at a final set of factors. This can be achieved using manual rotation based on theoretical judgement or automatically using varimax rotation employing a statistical, objective method. This process increases the loadings of certain Q sorts on to one factor and decreases their loadings on to other factors. The resulting factors represent Q sorts that are highly correlated with one other and uncorrelated with others.

- Factor arrays: This process details an idealised single Q sort for each factor, known as a factor array. These are calculated using factor estimates, providing a loading of Q sorts on to each factor. This creates a normalised weighted item score, known as a *Z score*, which represents items that define that factor.

- Factor interpretations: The factor arrays are then interpreted along with the qualitative information the researcher has obtained using a post-sort interview or questionnaire. This enables the creation of a representation theme or summary describing the viewpoint expressed by each factor.

A computer software package, PQMethod, is widely used to support statistical factor extraction, factor rotation, and production of factor arrays (Watts & Stenner, 2012).

3.5 Other Research Designs Considered

Q methodology was selected to explore the viewpoints of KS4 pupils regarding post-16 education and training opportunities. Other methodologies were considered and compared to Q methodology. This section outlines a basic overview of the alternative methodologies considered, along with an explanation of why Q methodology was chosen as most appropriate for this research.

3.5.1 Personal Construct Psychology

Kelly (1955) developed Personal Construct Psychology, positing that people are proactive in making sense of themselves and the world in which they live. Kelly (1955) took a social constructivist view of the world, suggesting that people construe the world around them in idiographic ways, responding to their own experiences. This theory

offers a way to understand the beliefs and world views of individuals by extrapolating their personal constructs. A diagnostic tool known as a repertory grid is used to draw out an individual's personal constructs in order to understand how they make sense of a particular topic. Statistical analysis can then be employed to draw out how these personal constructs relate to one other at an individual level. The resultant statistical data reveals commonalities between factors (personal constructs), providing an interpretation of how the individual makes sense of a focus topic (Paszkowska-Rogacz & Kabinska, 2012).

Personal Construct Psychology explores the views of participants at an individual level, generating themes that represent an individual's particular view, whereas Q methodology explores how social groupings or a particular group of individuals view a focus topic in similar ways, creating common themes that represent the collective view (Watts & Stenner, 2012). This study aims to capture the collective viewpoints of a certain social grouping to understand how differences in their views may inform educational policies and practices; as such, Personal Construct Psychology was not considered a suitable methodology for this research.

3.5.2 Exploratory factor analysis

Exploratory factor analysis was developed by Charles Spearman and looks at general laws derived from statistical aggregates, for example how variables or specific traits relate to one another (Watts & Stenner, 2012). Factor analysis, typically referred to as R methodology, as briefly discussed earlier, utilises the Pearson correlation coefficient ('r') to produce factor loadings which determine the degree to which individual items are measuring something in common, for example a factor (Gerber & Price, 2018). R methodology identifies the participants as the respondents and the questions as the variables (Watts & Stenner, 2012).

Q methodology, developed by Stephenson, is described as the inversion of R methodology as the participants, or more precisely their Q sorts, are the variables and the statements in the Q study are the subjects (Watts & Stenner, 2012). Q methodology systematically studies the varying range of perspectives held by participants regarding a particular topic area without imposing *a priori* theories in the

form of pre-set variables. This methodology uncovers patterns, known as significant correlations, in the data that represent a factor or particular viewpoint (Webler et al., 2009). R methodology is a quantitative approach, whereas Q methodology is known as a qualiquantological approach, combining quantitative and qualitative approaches (Watts & Stenner, 2012).

Q methodology is, therefore, the favoured methodology for the current undertaking as it enables the participants to impart meaning on to the statements, allowing them to actively create the variables that undergo statistical analysis, creating common factors or viewpoints (Coogan & Herrington, 2011).

3.6 Quality Criteria for Q Methodology

Q methodology is described as a qualiquantological approach, an alternative method used in social research which combines qualitative and quantitative approaches (Shemmings, 2011) to scrutinise the human condition (Stenner & Stainton Rogers, 2004). Q methodology does not seek to confirm a theory, but to explore patterns made by participants regarding a specific area of study. For example, in this study, Q methodology was used to explore how participants commonly configure or 'pattern' post-16 education and training opportunities (Stenner & Stainton Rogers, 2004). Q methodology is also considered an innovative complementary approach to qualitative analysis; the quantification of patterned subjectivities using Q sorts adds a quantitative element, providing rigour and transparency (Shemmings, 2011).

The quantitative aspect refers to the use of by-person factor analysis which creates statistical associations and enables the generation of factors captured by the normal distribution shape of a completed Q sort. The qualitative aspect of Q methodology refers to the use of abduction, where conclusions are drawn to create a single explanation or a wider explanatory theory. The combination of the statistical analysis and the abduction approach lead to the production of collective viewpoints (Watts & Stenner, 2012).

The quality criteria for Q methodology therefore requires exploration of the qualitative and quantitative indicators of research.

3.6.1 Quality indicators for qualitative research

The measures used to establish the validity and reliability of quantitative research cannot be applied to qualitative research, as these methods align to differing philosophical positions and purposes. It is important in all research, however, to establish rigour and transparency (Noble & Smith, 2015). Alternative quality indicators have been developed for qualitative research so that the trustworthiness and credibility of qualitative research data may be examined and documented. In using these quality indicators, the aim is to ensure that qualitative research adheres to a systematic procedure, resulting in coherent data from which conclusions may be confidently drawn (Odom et al., 2004).

Lincoln and Guba (1985) developed a framework of quality indicators to demonstrate value, consistency, neutrality and applicability in qualitative research. These are summarised in Table 3.2.

Quality Indicator	Description of Indicator	Criteria for Establishing Indicators
Credibility	All evidence is provided in detail and accurately supports what was studied.	• Prolonged Engagement • Persistent Observation • Triangulation • Peer Debriefing • Negative Case Analysis • Referential Adequacy • Member Checking
Transferability	Contextual information is provided to show that the findings may be applicable to other contexts.	• Thick Description
Dependability	A detailed approach is documented so that the research can be repeated or replicated.	• Inquiry Audit
Confirmability	The findings represent information gathered from the participants and not an interpretation of the researcher which may introduce bias.	• Confirmability Audit • Audit Trail • Triangulation • Reflexivity

Table 3.1: A table to show the quality indicators of qualitative research (Lincoln & Guba, 1989).

3.6.2 Quality indicators for quantitative research

A variety of quality indicators of quantitative research will be explored in this section. However, they may not be always be applicable to Q methodology.

3.6.2.a Reliability

Reliability refers to the degree to which the data from a piece of research can be depended on to be accurate, for example whether the same results would be found if the study were to be conducted on a different occasion (Robson, 2011). A completed Q sort may be viewed as a snapshot of the participants' viewpoints at one point in time, limiting its reliability.

However, the reliability of Q methodology can be demonstrated by replicating studies with a similar group of participants and finding reoccurring factors (Watts & Stenner, 2012). Attempts have been made to prove the reliability of Q methodology using test-retest procedures. For example, Akhtar-Danesh et al. (2008) found a 0.80 correlation coefficient for repeated Q sorts at different times with the same participants. In a systematic review of Q methodology studies, Dziopa and Ahern (2011) found variations in the procedural application and delivery of Q studies, calling into question the fidelity and replicability these studies. This can be overcome, however, by using open and transparent processes when undertaking a Q study and providing a rationale or justification for all decisions made.

3.6.2.b Validity

Validity refers to the extent to which the research achieves what it set out to do – in this case, explore the viewpoints of pupils regarding post-16 education and training opportunities (Robson, 2011). Webler et al. (2009) identified three ways to improve the validity of Q methodology. These are to:

- consult experts and review the research literature when refining the concourse to improve content validity;
- only make grammatical changes to the statements to improve face validity; and
- strive for a valid expression of opinion in each person's Q sort.

Researcher bias may pose a threat to the findings of a Q methodology study, as each stage requires a value judgement in line with a social constructionist approach. For example, bias may pose a threat during the data analysis phase as the researcher uses an abduction approach to select a particular factor solution (Webler et al., 2009). The application of the above control issues may minimise bias. Hughes (2017) notes that the sorting process in a Q methodology study reduces researcher bias as it allows the participants to sort through the statements independently, reducing the imposition of the researcher and social desirability of answers which can be encountered in an interview or focus group.

Q methodology is exploratory and comparative; it does not seek to find causal relationships. As such, Q methodology has an unusual relationship with questions of validity and reliability: as it does not claim to measure anything, it cannot be judged on whether it measured what it intended to. Q methodology aims to capture the subjective viewpoints of specific social groupings, of which there are no outside criteria (Brown, 1980). Q studies do, however, deliver what they claim to: capture the viewpoints of participants in the form of their Q sorts (Watts & Stenner, 2012).

3.6.2.c Generalisability

Generalisation refers to the extent to which the research findings can be applied to the wider population. A study using Q methodology cannot be generalised to the wider population; it is acknowledged that the findings only represent the viewpoints of a group of participants at a given time. Q methodology typically involves a small number of participants and a high level of subjectivity (Brown, 1980).

Webler et al. (2009) suggest that participants' viewpoints cannot claim to be held widely in a population; this may only be asserted if the study is replicated using a different methodology. The fundamental tenet of Q methodology claims that there are a finite number of perspectives on any given topic, which a well-structured Q-set should be able to uncover (Brown, 1993). Once the viewpoints have been identified using a Q methodology study, the beliefs of the wider population can be measured using a survey in which the identified viewpoints are presented and participants state whether they agree or disagree (Webler et al., 2009).

It is important that quality indicators are considered when conducting research to highlight any weaknesses and consider ways to overcome them. Q methodology is an alternative methodology; therefore, it is vital that a systematic and transparent procedure is followed and documented. The procedure adopted in this study has been documented in section 3.6.

3.7 Procedure for This Study

The procedure for this study, following the procedure outlined in section 3.5, will be now be outlined in detail.

3.7.1 Definition of the concourse

The concourse of items was drawn from an eclectic range of sources via the following three processes.

3.7.1.a Literature review

The University of Nottingham's meta-search engine was used to identify relevant published literature from a variety of electronic databases: ERIC, OVID Psych Info, and Web of Science. A search was also conducted on Google Scholar. In addition, a number of governmental documents relating to post-16 education and training were reviewed.

3.7.1.b Two interviews with domain-specific managers

Semi-structured interviews took place with the following domain-specific professionals:

- the post-16 education manager in the host authority; and
- the transitions team social work manager in the host authority, responsible for supporting children from secondary to post-16 provision.

The interviews lasted around 30 minutes each and followed a semi-structured format. The research aims and rationale were presented to the professionals. This was followed by a series of questions which explored their views of post-16 education and

training opportunities, the barriers to engagement and helping factors, and their views on strategies designed to support children to engage in post-16 education and training, for example the careers advice service.

3.7.1.c Focus group with pupils in a participating school

One focus group took place in July 2019 with five year 10 pupils from a participating school in the host authority. Exam commitments prevented year 11 pupils from participating in the focus group. The focus group lasted around 30 to 45 minutes. The aim of the focus group was to collect a broad and diverse range of pupils' views regarding post-16 education and training opportunities by asking them a series of open-end questions, such as 'What are your views of the opportunities available in post-16?' A detailed description of these questions is included in Appendix 5.

To facilitate this process an approach known as the Nominal Group Technique (NGT) was employed. The NGT aims to bring a structured approach to a small-group discussion which encourages all participants to contribute and prevents any one person dominating the conversation (Potter, Gordon & Hamer, 2004). The NGT was first noted in the 1960s as a procedure to facilitate effective group decision-making in social psychological research (Delbecq & van de Ven, 1971). This approach was selected as a means to elicit the views of all participants, including those who may not hold strong views or opinions regarding post-16 education and training opportunities or have a clear understanding of education after year 11.

Potter, Gordon and Hamer (2004) detail the five stages involved in the NGT process. These stages, along with descriptions of how the researcher adhered to this approach, are as follows:

- Introduction and explanation: The topic of the research was presented to the participants. The research question, 'What are the viewpoints of Key Stage Four pupils regarding post-16 education and training opportunities?', along with additional questions (detailed in Appendix 5), were posed to participants.

- Silent generation of ideas: Each participant was provided with a sheet of paper and asked to write down their response to the research question. This typically lasted around 10 minutes. Participants were asked to do this individually and to refrain from discussing their ideas as a group.

- Sharing ideas: The participants were asked to share their thoughts, beliefs and opinions regarding post-16 education and training opportunities. The researcher recorded on to a piece of flipchart paper all responses offered. This process continued until all ideas had been noted. The researcher then reviewed all views and deleted any duplications. Finally, the researcher read out all views offered to ensure everyone's views had been captured accurately.

- Voting and ranking: This stage involves the prioritisation of ideas in relation to the question posed. This stage was not included in the focus group as the Q-sort participants would be asked to rank the statements at a later stage, that is, views of post-16 education and training opportunities were to be captured in the later Q-sort process.

The above processes led to the generation of a concourse consisting of 252 statements. These statements were recorded in a Microsoft Word document along with the sources from which they were obtained (Appendix 6).

3.7.2 Development of the Q-set

A multi-staged approach was utilised to refine the concourse to a Q-set. This guaranteed that a clear and rigorous process was followed to ensure the Q-set accurately captured the wider concourse.

The first stage included the use of a structured inductive approach, known as *thematic analysis*, developed by Braun and Clarke (2006). Thematic analysis is a method used to identify, analyse and report patterns or themes within a data set (Braun & Clarke, 2006). This method was selected on the basis that it would offer a clear and rigorous approach to ensuring the Q-set represented the wider concourse. Each statement was printed out separately on to paper. With the purpose of reducing the concourse of 252

items to a representative set of between 40 and 60 statements, the researcher loosely followed Braun and Clarke's (2006) guide to thematic analysis, which consisted of the following stages:

- The researcher familiarised herself with the data, through repeated reading of the statements, to ensure she was conversant with the entire concourse.

- Generation of themes: this involved working through the entire data set, giving equal attention to each item and identifying elements within the data, creating themes. The researcher then mapped on to each theme the corresponding statements. Here, duplicate statements were removed to produce a manageable sample. The statements were also refined under each theme to achieve 'optimum balance, clarity, appropriateness, simplicity and applicability', particularly with respect to statements typically containing no more than one idea (Stainton Rogers,1995).

- The process led to the refinement of the concourse from 252 statements to a Q-set of 55 statements in preparation for the Q sort.

The researcher also referred to Oppenheim's (1992) questionnaire design, interviewing and attitude design guidance, to ensure the statements were clear, intelligible, unambiguous and naturalistic. This led to consultations with the following people:

- Educational psychologists (EPs), TEPs and assistant EPs in the host authority; and
- A researcher familiar with Q methodology.

The Q-set of 55 statements was then piloted with three year 11 pupils from an authority outside of the host authority. The participants were asked to complete a post-sort questionnaire to ascertain whether there were any statements that they did not understand or any statements they felt were missing. The participants reported that there were too many statements in the Q-set, identifying specifically statements they felt were duplicated. This led to a further refinement of the Q-set from 55 statements

to 41 statements, as documented in Appendix 7. The Q-set was piloted once more to ensure its suitability with one year 10 participant. At this stage no additional concerns were raised. This helped to confirm that the 41 item Q-set was appropriate.

A copy of the final 41-item Q-set can be found in Appendix 8.

3.7.3 Selection of the P-set and condition of instruction

The viewpoints of KS4 pupils from mainstream secondary schools in the host authority and surrounding areas were sought based on reasons previously outlined in the literature review.

The pupils that made up the P-set attended eight secondary schools in the focus LA. To ensure that these schools remain anonymous a coding system has been utilised: each school is allocated a letter, for example school A, school B and so on. The characteristics of each school are set out in Table 3.1.

	School A	School B	School C	School D	School E	School F	School G	School H	School I
Type of school	Academy	Academy	Academy	Maintained	Free school	Maintained	Maintained	Academy	Academy
Number of students on roll	1200	1842	1423	1023	361	1524	1884	1109	1032
Gender	Female	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed
School age range	11–18	3–19	11–18	11–18	11–18	11–16	11–18	11–18	11–16
Percentage of students who achieved '5 A* to C GCSE grades' in 2019	36.9 %	33%	38%	47.6%	8.2%	23.4%	34.5%	37.8%	43.8%
Ofsted rating at the most recent inspection	Good	Good	Good	Good	Good	Outstanding	Good	Requires Improvement	Good
Staying on in education or entering employment (2017 leavers)	96%	86%	92%	96%	-	89%	95%	91%	96%

Table 3.2: A table to show the characteristics of the nine schools that participated in the research.

‘All of the secondary schools except school E have a large number of students on roll. The majority of the secondary schools have received an Ofsted rating of *Good,* with school F receiving an *Outstanding* rating and school H receiving a *Requires improvement* rating. All but one school have a mixed gender intake; school A is an all-girls school. The majority of schools were below the national average percentage of ‘5 A* to C GCSE grades’ (43 per cent) in 2019, with school E being significantly below this and schools D and I being just above the average.

The participants were recruited using strategic sampling techniques to form the P-set. The researcher mapped out schools in located in the north, south, east and west of the district. Schools were selected based on their status to ensure a variety of school types (for example academies, voluntary aided and maintained schools) were represented. Contact was made with the schools via email communication or a face-to-face meeting with the headteacher or senior leadership team. The researcher liaised with each school to ensure that an adequate amount of time was given to recruit pupils, share information sheets with parents, obtain parental consent (Appendices 13 and 14) and find a practical space to complete the Q sort. Flexibility was offered to the schools to minimise the impact of harm, for example pupils missing lessons to complete the Q sort. The researcher held ‘Q-sort sessions’, before and after school and during lunchtime to accommodate the needs of the pupils and schools.

All schools participating in the research were provided with information sheets, General Data Protection Regulation (GDPR) information sheets and consent forms. Parental consent was obtained prior to pupil participant consent.

Participants were recruited based on the criteria that they were in KS4 of a secondary school. More specifically, the researcher asked the school staff to recruit pupils of mixed gender and ability, with a reasonable grasp of written English. Following the strategic sampling techniques, schools were asked to select a mixture of pupils who had a strong opinions about post-16 education and training, or a clear view of what they hoped to do after year 11, and in contrast to that, pupils who were unsure about their plans after year 11 and were unclear about post-16 education and training opportunities.

32 participants from nine secondary schools completed the Q sort in November and December 2019. The participants' demographic information is presented in Table 3.2.

Demographic characteristic	Category	Number of participants	Percentage of total N
Gender	Female	16	50%
	Male	16	50%
School year	Year 10	12	37.5%
	Year 11	20	62.5%
Ethnicity	White British	13	41%
	Asian	13	41%
	Black Caribbean	2	6%
	Other	4	12%
Plans after year 11	Sixth form	15	47%
	College	7	22%
	Internship	1	3%
	Apprenticeship	2	6%
	Not known	7	22%

Table 3.3: A table to show the demographic characteristics of the P-set (n=32).

The condition of instruction was formulated to answer the research question. This question was refined to ensure it included one proposition and was clear and concise (Watts & Stenner, 2012). The condition of instruction was:

'Sort the 41 items regarding education and training opportunities after year 11 according to **how strongly you agree or disagree** with them'.

3.7.4 Q-sorting

The Q sorts were administered over a seven-day period. Within each school, Q sorts were completed in small groups.

Each individual participant was placed either on a separate table or provided with space on a larger table to ensure the task was carried out individually and that no interaction occurred between participants. The researcher was present at each of the Q-sorting days which allowed participants to ask specific questions and receive assistance where required. The researcher talked through the instructions for the Q sort stage by stage to ensure all participants understood what the Q sort entailed. The participants were also given an instruction sheet to follow, which acted as a visual prompt. The researcher kept the number of participants in the Q sort to a maximum of five to ensure the Q-sorting process was followed as prescribed.

The following documents were used to support the administration of the Q sort:

- a GDPR information sheet for participants (Appendix 11);
- a general information sheet for participants (Appendix 10);
- an activity instruction sheet for participants (Appendix 15);
- a 41-item Q-set on individually printed cards measuring 5.5cm by 3cm;
- an A3 blank forced-distribution grid (Appendix 16);
- an A4 blank forced-distribution grid;
- a post-sort activity questionnaire (Appendix 17); and
- a debrief form (Appendix 18).

The information sheet, GDPR information sheet, consent form and debrief form emphasised a number of ethical considerations that will be discussed in more detail in section 3.8.

Participants were asked to sort through the 41-item Q set and rank the items so as to indicate how much they agreed with them, following the process outlined above and using a distribution grid.

Throughout the Q sort, participants were reminded that they could ask questions and withdraw at any time. Participants were informed that the sorting of items should be based on their own beliefs, ideas and values at the time and reassured that there was no right or wrong answer.

The size of the distribution and its *kurtosis* were considered. The researcher selected a 9-point scale (−4 to +4) based on the number of items in the Q-set (Watts & Stenner, 2012). The kurtosis of the distribution grid was neither extremely steep nor narrow. The researcher felt that neither extreme would be appropriate as the participants have some knowledge of post-16 education and training opportunities, but it is a fairly complex topic area. The grid was therefore selected with the aim of reducing any anxiety that the participants may have felt during the decision-making process. The distribution grid can be seen in Figure 3.1.

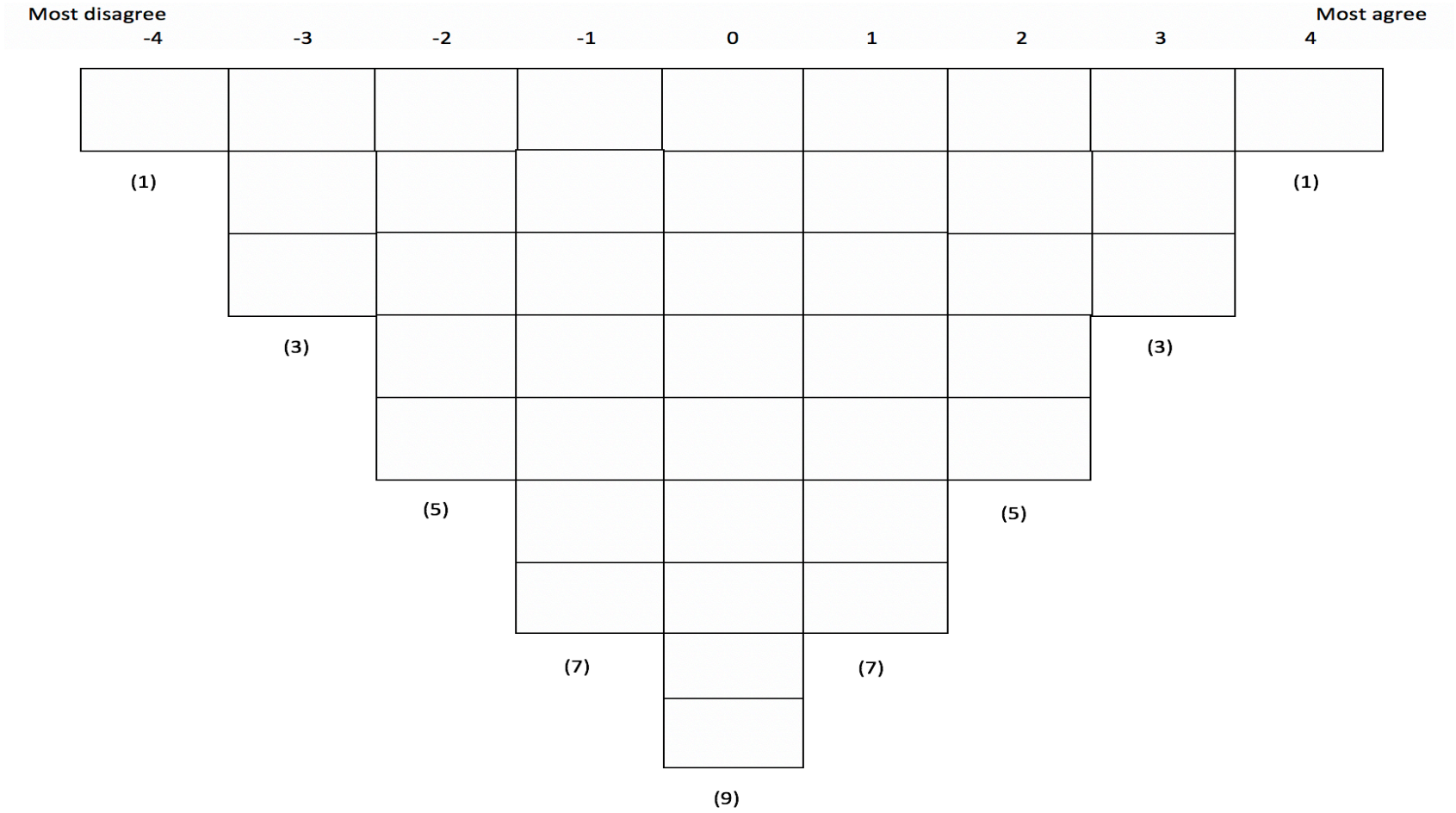

Figure 3.1: A figure to show the fixed-distribution grid.

Following completion of the Q sort, the participants were asked to transfer the Q sort on to a blank fixed-choice distribution grid on an A4 sheet. This was done by noting the numbers of each item into their corresponding position on the blank grid. Once each participant indicated that they had finished the Q sort, the researcher checked their completed A4 distribution grid to make sure no transcription errors were made.

The participants were then asked to complete a post-sort questionnaire, which consisted of the following questions:

- Questions about demographics, for example age (school year group), gender and ethnicity.
- What are your plans after year 10/11, for example sixth form, college, apprenticeship or internship?
- Which statement did you most agree with and why?
- Which statement did you most disagree with and why?
- Are there any comments you would like to see added to the activity?
- Are there any comments you did not understand or did not make sense to you?
- Any other comments?

The qualitative information that the questionnaire provided was used to help interpret the common factors or viewpoints that were extracted.

3.7.5 Factor analysis and interpretation

The procedure outlined in section 3.5.5 was followed when analysing and interpreting the data. The PQ software version 2.33 developed by Schmolck (2013) supported the analysis and interpretation of the data. A detailed description of the data analysis and interpretation can be found in chapter 4.

3.8 Ethical Considerations

Ethical considerations were of paramount consideration, informing all decisions that were taken throughout the research process. Key ethical decisions were made according to:

- the British Psychological Society Code of Human Research Ethics (BPS, 2014b);
- the Health and Care Professions Council Guidance on Conduct and Ethics for Students (HCPC, 2016);
- the HCPC Standards of Conduct, Performance and Ethics (2016); and
- the University of Nottingham Code of Research Conduct and Research Ethics (University of Nottingham, 2016).

The University of Nottingham's Ethics Committee granted ethical approval in April 2019 prior to any data collection. A completed ethics application is included in Appendix 9.

The following key ethical considerations were addressed:

3.8.1 Informed consent

The participants, their parents and key stakeholders were provided with information sheets (Appendices 10 and 13) in advance of the research. This included an information sheet specifically detailing the process of storing data in line with the GDPR (2018) legislation (Appendix 11). Information sheets were also given to participants and their parents (if applicable) for the focus group, interviews and pilot study. Participants, their parents and key stakeholders were given the opportunity to ask questions and were provided with contact details to do so. The researcher arranged initial meetings with senior management in the school to introduce the research topic and provide an opportunity to ask questions.

Informed consent was obtained from the participants (Appendix 12) and their parents (Appendix 14). The participants and their parents, on their behalf, were asked to sign the consent forms to agree to take part in the study. Throughout the research, the participants were verbally reminded of their right to withdraw at any point. Their parents were also informed of their right to withdraw on behalf of their child. This was also extended to senior leaders at the initial meeting in school.

3.8.2 Confidentiality

All participants were assigned numbers to ensure information remained confidential. The researcher ensured that the post-sort questionnaire sheet (Appendix 17) adhered to the GDPR legislation under the Data Protection Act 2018 by not asking for information that may be classed as sensitive, for example the participants' religion. Additionally, the post-sort questionnaire did not request any information that may identify the participant directly.

3.8.3 Debrief

A debrief sheet was given to all participants detailing the rationale for the research and contact details of the researcher and her supervisors. The researcher explained that she would present the findings to the host authority with the purpose of informing post-16 provision.

The researcher liaised with senior members of staff in the schools to ensure that participation in the Q sort occurred at a time and place convenient to the children so as to cause no harm. The children participating in the research were in year 10 and 11, so consideration was given to GCSE examinations: the Q sorts were conducted in the first term of the academic year so as not to add additional pressure to the examination period.

3.9 Research Schedule

The timescales for this research are shown in Table 3.4.

Month and year	Action
October 2018	Discussion with stakeholders
October 2018 – October 2019	Literature review
December 2018	Submission of research proposal
April 2019	Ethics approval
March – July 2019	Development of concourse
August – October 2019	Refining of concourse and Pilot Q-set
October – December 2019	Data collection
December 2019 – February 2020	Data analysis

Table 3.4: A table to show the research schedule followed in this research.

3.10 Summary of the Methodology

This chapter has described in detail the processes involved in conducting research using Q methodology. It has provided a rationale as to why this approach has been selected and noted the processes followed in this study. The next chapter will present the stages of analysis and document the findings.

4. Results

4.1 Introduction to the Results

This chapter will follow the Q methodology data analysis process, presenting the findings at each stage of the procedure in the following sections:

- Overview of Factor Analysis in Q Methodology;
- Factor Extraction;
- Factor Rotation;
- Factor Arrays;
- Factor Interpretations;
- Consensus Statements;
- Non-significant and Confounding Q Sorts; and
- Summary of the Results.

4.2 Overview of Factor Analysis in Q Methodology

The data analysis procedure used in Q methodology adopts a by-person factor analysis approach. This approach selects the participants' Q sorts as the variables; a completed Q sort can be defined as the sequence in which the participants arranged the statements on the distribution grid. The Q sorts are statistically analysed to reveal the similarities and differences between them (Van Exel & De Graaf, 2005). This leads to the identification of *factors*, where groups of Q sorts that are similar and highly correlated are extracted. The factors represent an overall common viewpoint held between the participants (Watts & Stenner, 2012).

The data collection process led to the completion of 32 Q sorts. An inductive approach was selected by the researcher to ensure that the data drove the process, rather than the researcher's preconceived ideas or hypotheses. Watts and Stenner (2012) suggest that the researcher should define their analytical approach to ensure that their position in the research is transparent, sensitive and responsive to the data.

The PQMethod computer programme (version 2.35), developed by Schmolck (2013), supported the data analysis process. The computer programme generated a by-person correlation matrix, extracted and rotated the factors and generated factor arrays for interpretation. The researcher used the additional qualitative information from the post-sort questionnaires to support the interpretation of factor arrays into common viewpoints.

4.3 Factor Extraction

PQMethod initially creates a by-person correlation matrix, an intercorrelation of each Q sort with every other Q sort (Watts & Stenner, 2012). This is then followed by the factor extraction phase, where Centroid Factor Analysis (CFA) or Principal Component Analysis (PCA) can be used to extract factors from the data. The researcher chose to extract seven factors using CFA, leaving all possible factor solutions open. This appears to be the analysis most often chosen by Q methodologists as it enables the researcher to explore the data in detail, taking an abductive approach which is theoretically informed rather than mathematically driven (Brown, 1980). In contrast, PCA provides a single and mathematically best solution, overlooking other factor solutions that may offer alternative viewpoints (Watts & Stenner, 2012).

Brown (1980) advises that extracting seven factors at this stage is appropriate, this being the maximum number of factors that one can extract using the PQMethod software. The factor extraction process uses correlations to identify highly correlated Q sorts that load on to each factor (Watts & Stenner, 2012). The seven extracted factors, Eigenvalues and explained variance for each factor are shown in Table 4.1.

Q sort	Factors						
	1	2	3	4	5	6	7
1	X0.55941	−0.13695	0.00954	−0.03206	0.00064	−0.36333	0.12999
2	X0.50626	X−0.46853	0.12148	−0.11982	0.01024	−0.21906	0.04279
3	X0.54714	0.33173	0.06023	0.06197	0.00306	0.30024	0.09137
4	X0.46559	0.38622	0.08244	−0.25793	0.05008	−0.10753	0.00944
5	X0.66492	0.1962	0.02085	0.10687	0.00888	−0.11589	0.01111
6	0.39366	X−0.49339	0.13588	−0.35461	0.09877	0.26884	0.07231
7	0.34486	X0.67122	0.27698	−0.1034	0.00814	−0.15859	0.02157
8	X0.65631	−0.04665	0.00106	0.09557	0.00713	−0.14874	0.01884
9	X0.73416	0.20188	0.02212	0.01543	0.00023	−0.08776	0.00614
10	X0.69994	−0.062	0.00192	−0.07305	0.00369	−0.09645	0.00752
11	0.61864	−0.00941	0.00003	X0.44357	0.16672	−0.25539	0.06049
12	0.43024	X0.56255	0.18146	−0.33024	0.0847	0.18127	0.03222
13	X0.68985	0.13023	0.00926	0.18624	0.02684	0.13101	0.01693
14	0.3224	−0.21026	0.02291	0.31158	0.07726	0.03054	0.0011
15	X0.65774	0.37833	0.07906	−0.11458	0.00934	−0.21156	0.03973
16	0.2754	X0.57425	0.19336	−0.36816	0.10727	0.17246	0.02926
17	X0.67019	0.2545	0.03515	0.04044	0.00135	0.0833	0.00708
18	0.34807	X−0.5492	0.17199	0.33814	0.09192	0.02345	0.00072
19	0.37659	0.20649	0.02305	−0.28425	0.06148	−0.35199	0.12085

20	0.42514	−0.20276	0.02126	−0.35904	0.10149	0.35015	0.12784
21	X0.45162	X−0.4625	0.11814	−0.39404	0.12453	−0.04242	0.00143
22	X0.62482	−0.18226	0.01712	0.11307	0.00993	−0.08367	0.00554
23	X0.64532	0.15867	0.01365	−0.03104	0.0006	0.15863	0.02471
24	X0.44371	−0.16429	0.01383	0.16353	0.02066	0.10846	0.01173
25	0.4307	0.32042	0.05608	0.3153	0.07921	−0.16299	0.02283
26	X0.62625	0.25577	0.03549	−0.02123	0.00026	0.05852	0.00365
27	X0.62054	−0.09284	0.00432	−0.04098	0.00109	0.20995	0.04337
28	X0.46932	0.04573	0.00119	0.06705	0.00357	0.20127	0.03981
29	X0.57216	−0.30671	0.0498	0.11062	0.0095	0.15888	0.02478
30	0.27085	−0.37104	0.07404	−0.13259	0.01262	0.14496	0.02067
31	X0.55139	−0.10424	0.00545	0.26128	0.05351	−0.25686	0.0602
32	0.1589	0.30953	0.05227	0.38148	0.11922	0.0698	0.00523
EGV	**8.9307**	**3.3940**	**0.2601**	**1.7057**	**0.1280**	**1.1538**	**0.0813**
Ex. V	**27.9%**	**10.6%**	**0.8%**	**5.3%**	**0.4%**	**3.6%**	**0.3%**

Table 4.1: A table showing the seven unrotated factors extracted using Centroid Factor Analysis.

EGV = Eigenvalue
Ex. V = Explained Variance
X = Q sorts that significantly load on to each factor

Watts and Stenner (2012) advise that all seven unrotated factors are examined in detail to determine which factors should be retained for rotation and analysis. At this stage, a variety of different criteria can be applied to guide the decision-making process. These approaches consist of helpful parameters rather than rules to be obeyed (Watts & Stenner, 2012). The researcher selected a number of criteria to support the decision-making process.

4.3.1 Kaiser-Guttman criterion

In this criterion it is advised that Eigenvalues of less than 1.00 are marked as a cut-off point for extraction and retention of factors. It is said that the Eigenvalue offers a clear indication and potential exploratory power of an extracted factor. Factors with an Eigenvalue of 1.00 or more should therefore be retained for rotation as they will make a significant contribution to the final factor solution (Watts & Stenner, 2012).

As shown in Table 4.2, factors 1, 2, 4 and 6 have an Eigenvalue of more than 1.00. The Kaiser-Guttman criterion suggests that these four factors should be extracted and retained for factor rotation and the other three factors should be disregarded.

Several researchers caution against applying this criterion too strictly, suggesting that this may lead to retention of an overly large number of factors or may lead to other factors being overlooked (Brown, 1980; Kline, 1994). The researcher therefore decided to apply other criteria to help determine the appropriate number of factors to extract and rotate.

4.3.2 Two or more significantly loading Q sorts on a factor

It is recommended that each factor is defined by two or more significantly loading Q sorts. A factor with one significantly loaded Q sort would present a challenge as it would be mathematically impossible to distinguish the social narrative from one perspective (Brown, 1980). To calculate how many Q sorts significantly load on to each factor, a significance level for the study must be calculated. Brown (1980) proposed the following equation to calculate the level of significance at the 0.01 level:

= 2.58 x (1÷ (√no. items in Q-set)

Therefore, within this study:

= 2.58 x (1÷ (√41)

= 0.40 (to two decimal places)

The figures shown in Table 4.2 suggest that factors 1 and 2 should be retained and rotated. This indicates that two of the seven factors met the criteria proposed by Brown (1980). If the rule were applied with flexibility, it could be argued that three factors could be retained and rotated as factor 4 has a Q sort with a loading of 0.44 and another with a loading of 0.39.

4.3.3 Humphrey's rule

An additional method, known as Humphrey's rule, can be applied to determine the appropriate number of factors to retain and rotate. Brown (1980) suggests that a factor is significant if the cross product of its two highest loadings (calculated by multiplying the two highest values) exceeds twice the standard error. The standard error can be calculated using the following equation:

1 ÷ (√no. of items in Q-set)

Therefore, in this study:

= 1 ÷ (√41)

= 0.16 (to two decimal places)

Twice the standard error:

= 0.16 x 2

= 0.32

Factors 1 and 2 had a cross product that exceeded twice the standard error, implying that those two factors should be extracted and rotated. Watts and Stenner (2012) do suggest, however, that Humphrey's rule can be applied less strictly by including factors that have cross products which merely exceed the standard error. In applying this rule three factors could be extracted and rotated. This suggests that two to three factors can be extracted and rotated.

4.3.4 Scree test

A further and final criterion, the Scree test, was explored to help to determine whether to extract and rotate two, three or four factors. Devised by Cattell (1966), this test helps with the decision-making process by graphically plotting Eigenvalues in relation to factors. It is proposed that the number of factors to be extracted should be based on the gradient of the slope: the point at which the slope starts to level out indicates which factors to rule in and which to discard. This rule states that all factors on the left-hand side of the point at which the slope changes are retained for further analysis. Scree tests can only be undertaken on data analysed through PCA (Watts & Stenner, 2012). The data was therefore analysed using this method of factor analysis enabling the researcher to graphically plot the factors and Eigenvalues (Table 4.2; Figure 4.1).

Q Sort	Factors							
	1	2	3	4	5	6	7	8
1	0.5860	0.0801	0.1361	−0.0002	0.4680	−0.0492	−0.0613	0.0998
2	0.5381	0.5346	−0.0723	−0.1619	0.3775	−0.2832	−0.0304	−0.0878
3	0.5805	−0.2779	−0.1884	−0.1886	−0.4941	−0.0377	0.3137	0.0390
4	0.4861	−0.4095	−0.3852	0.1324	0.1141	0.4565	0.0062	−0.1568
5	0.6907	−0.2066	0.1132	−0.1190	0.1683	−0.1659	0.0217	0.1574
6	0.3971	0.6012	−0.3293	−0.0091	0.0091	0.0430	−0.2759	0.1596
7	0.3754	−0.7114	−0.1477	0.1794	0.1537	0.2533	−0.0061	0.1987
8	0.6596	0.0030	0.2880	0.2327	0.1641	0.0729	0.1099	0.2837
9	0.7452	−0.2276	−0.0722	−0.1693	−0.0763	0.1058	0.0936	0.0230
10	0.7045	0.0906	−0.0061	0.2164	0.0817	−0.1267	0.3077	0.1027
11	0.6589	−0.0189	0.5191	0.0194	0.0907	−0.2153	0.0611	−0.2715
12	0.4220	0.5816	−0.1587	0.5007	−0.0291	0.0032	0.0559	0.0957
13	0.7062	−0.1257	0.1860	0.1356	−0.2364	−0.2369	0.0867	0.0375
14	0.3302	0.1739	0.4722	0.4210	−0.0987	0.4605	−0.1726	0.0960
15	0.6694	−0.4183	−0.0966	0.2612	0.1309	0.1353	−0.1526	−0.1456
16	0.2976	−0.5035	−0.4388	0.3058	0.0223	−0.1653	−0.1611	0.1376
17	0.6840	−0.2365	−0.0674	−0.1353	−0.0373	0.0467	−0.3138	−0.0054
18	0.3662	0.5352	0.3211	−0.1449	0.0162	0.2127	−0.0542	0.3863
19	0.4096	−0.2471	−0.2632	0.0531	0.5572	−0.0136	0.3731	−0.0587

20	0.4383	0.3786	−0.5655	−0.2038	−0.2116	0.1138	−0.1106	0.1793
21	0.4677	0.5426	−0.3101	0.1216	0.1410	−0.1570	−0.1794	0.0140
22	0.6461	0.1744	0.1832	−0.3004	0.1623	−0.0341	−0.0809	−0.1911
23	0.6620	−0.0982	−0.1706	−0.1619	−0.0662	−0.1011	0.2465	−0.2003
24	0.4655	0.2555	−0.0129	−0.5376	−0.1426	0.3041	0.3528	0.1029
25	0.4801	−0.4083	0.1770	−0.2563	−0.1163	0.2604	−0.3318	−0.2487
26	0.6490	−0.2236	−0.2028	−0.3306	−0.0839	−0.2562	−0.1959	0.1989
27	0.6396	0.1763	−0.0977	0.1955	−0.3550	−0.1355	−0.2961	−0.1197
28	0.5001	−0.0497	0.1556	0.3352	−0.3602	−0.3514	0.0308	−0.2703
29	0.5757	0.3283	0.1101	−0.0281	−0.2068	0.1773	0.0441	−0.1705
30	0.2853	0.4230	−0.1499	0.3113	−0.1828	0.2591	0.3774	−0.1505
31	0.5827	0.0623	0.3982	−0.1356	0.1389	0.1540	−0.0994	−0.1686
32	0.1937	−0.4286	0.3783	0.0289	−0.2239	−0.1801	0.0575	0.5497
EgV	9.5788	4.6266	2.2910	1.8101	1.6521	1.3978	1.2600	1.2021
Ex V	29.9	14.5	7.2	5.7	5.2	4.4	3.9	3.8

Table 4.2: A table to show the eight unrotated factors using Principal Component Analysis.

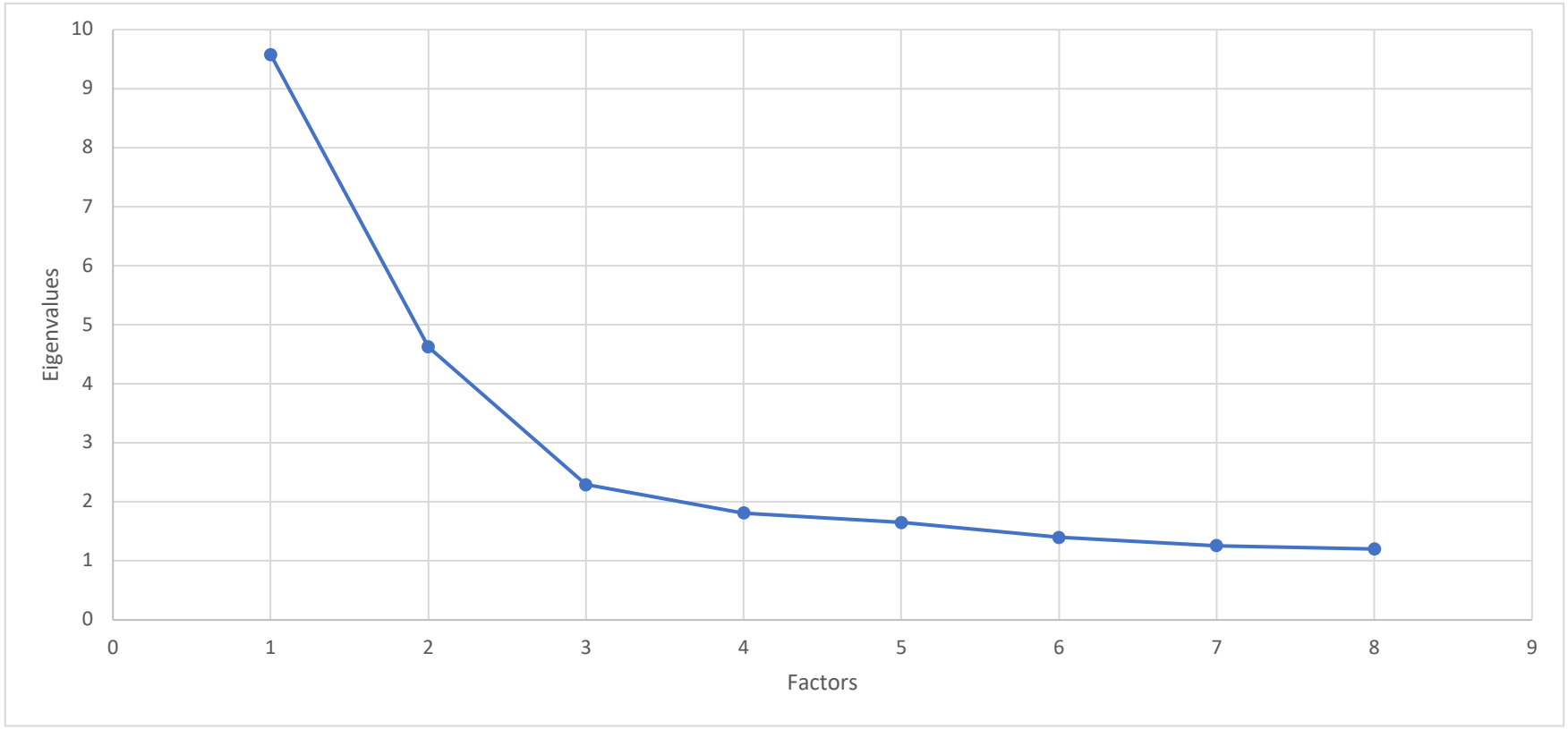

Figure 4.1: A figure to show the Scree Test plot graph.

The slope in Figure 4.1 appears to change at point 3; here the gradient of the slope begins to flatten and even out. The researcher consulted six TEPs and asked their opinion: five stated that the slope appeared to flatten at point 4, and one stated that slope flattened at point 3. This suggests that three to four factors should be extracted and rotated.

The three criteria, as outlined above, suggest that three of the seven factors should be extracted and rotated for further analysis to inform the best factor solution. Two of the criteria suggest that two, three or four factors could be extracted and rotated.

4.4 Factor Rotation

The factor rotation process aims to increase the meaningfulness of each factor by exploring the relative position of each Q sort loading on to each factor (Watts & Stenner, 2012). In Q methodology, factor rotation can be completed using two methods: manual or varimax rotation. Manual rotation employs a by-hand technique and is driven by a preconceived idea or theory held by the researcher. The examination and rotation of factors serves as a means to test their hypotheses, for example how a certain group of individuals' perspectives relate to one another (Van Exel & De Graaf, 2005). Manual rotation, however, may not be the option of choice for many novice Q methodologists as it is described as time-consuming, subjective and challenging and also relies on having a preconceived idea (Watts & Stenner, 2012). Varimax rotation, offered by PQMethod, is an alternative method which can be used easily and effectively with larger data sets. This method uses an algorithm to automatically rotate the factors so as to increase the loading of the Q sorts on to one factor and maximise the amount of variance explained on as few factors as possible. This method is seen as an objective and transparent approach which is based on statistical principles and helps to avoid researcher judgement (Webler et al., 2009).

Watts and Stenner (2012) recommend using varimax and manual rotation together as a useful and effective way of exploiting their complementary strengths. It is suggested that a varimax rotation can be used at the outset, allowing the data to take the lead and draw out the dominant viewpoints, thereby adhering to an inductive approach. This can be followed by a manual rotation, with the use of substantial knowledge from

the varimax rotation, which can help the researcher to load as many Q sorts as possible on to a factor. This enables the representing of as many individual views as is feasible.

It is recommended that the researcher extracts and rotates a number of different factor solutions to preserve as much of the variance as possible (Van Exel & De Graaf, 2005). Brown (1980) suggests that insignificant factors often contain small amounts of systematic variance that can help in improving the factor loadings of the main factor through the process of rotation. The criteria outlined in section 4.3 suggested that three to four factors should be extracted and rotated. The researcher also extracted and rotated five factors to ensure the preferred solution met several criteria, which will be outlined later in this chapter.

Ultimately, three factors were extracted and rotated using varimax rotation. This created a factor solution of 28 Q sorts loading on to three factors, with at least seven Q sorts loading on to one factor which explained 50 per cent of variance. Two of the Q sorts loaded on to two factors (categorised as confounding Q sorts), and two of the Q sorts did not load significantly on to any factor (categorised as non-significant or spurious Q sorts).

The researcher then employed manual rotation to examine each factor solution and ascertain whether further rotation would result in any of the confounding or non-significant Q sorts loading on to a single factor. Stainton Rodgers (1995) recommends that a factor solution with many Q sorts loading on to a single factor is desirable, as it represents more participants' views. The aim of the research was to capture as many views from the participant group as possible.

Factors 2 and 3 were manually rotated in a pair by −3 degrees to load participant/Q sort 25 on to factor 1 (Figure 4.2). This was achieved without significantly affecting the other Q sorts loaded on to the factors. This resulted in 29 Q sorts loading on to a three-factor solution which accounted for 50 per cent of variance. It is desirable to obtain a factor solution that accounts for as much variance as possible and it is generally believed that a variance of between 35 per cent and 40 per cent or more is an acceptable solution (Kline, 2014; Watts & Stenner, 2012).

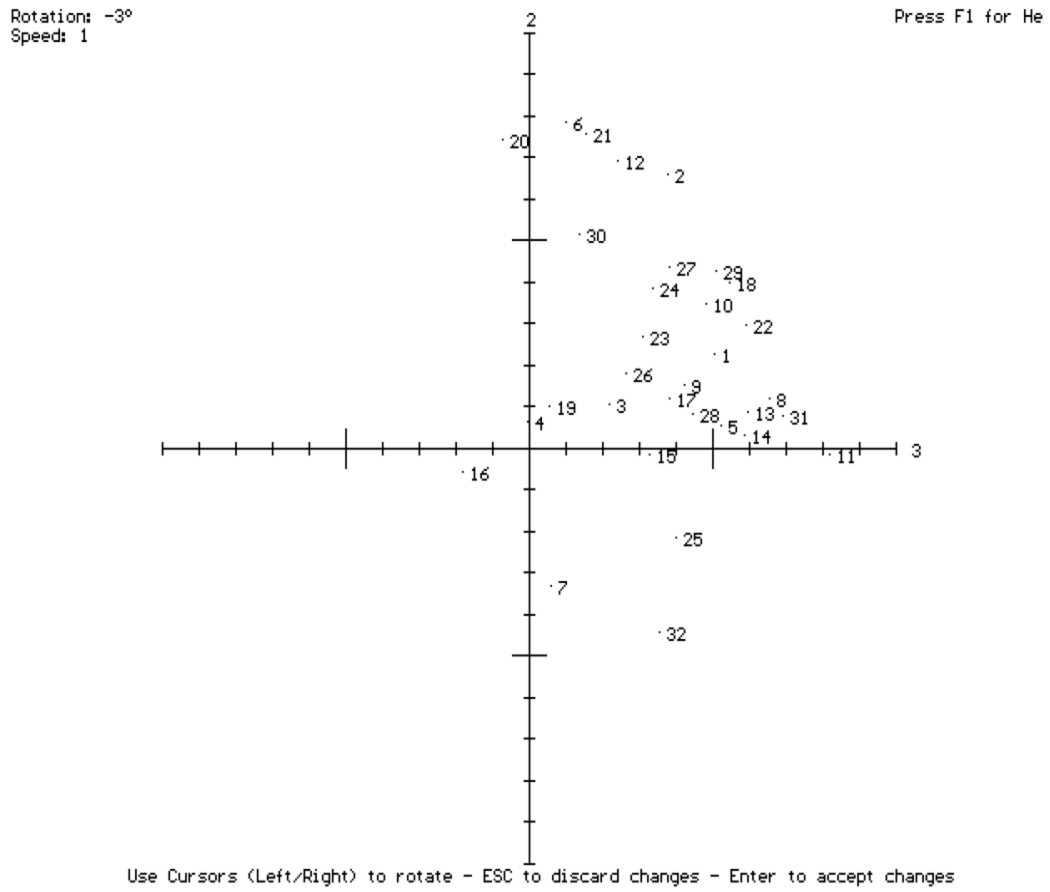

Figure 4.2: A scatter graph to show the manual rotation of factors 2 and 3 by −3 degrees.

The researcher consulted criteria to support the decision-making regarding the number of factors to be included in the final factor solution. Webler et al. (2009) suggest that a good factor solution should have four qualities:

- Simplicity – Consider as few factors as possible to make the viewpoints of interest easier to understand whilst not losing nuances within the data.
- Clarity – Each factor should consist of Q sorts that load significantly on to one factor only, minimising and removing confounding and non-significant Q sorts.
- Distinctiveness – Factors should not be highly correlated as these accounts may be similar. Factors with low to moderate correlations should be considered as they may account for important points of difference.

- Stability – Look for clusters of Q sorts as these will represent individuals who think similarly and preserve these factors.

To explore the distinctiveness of the factors, the researcher considered the correlations between the factors (Table 4.3). Dancey and Reidy (1999) recommend that the strength of the correlation should be categorised as follows:

- 0.1 to 0.3 should be seen as weak;
- 0.4 to 0.6 as moderate; and
- 0.7 to 0.9 as strong.

Factors	1	2	3
1	1.0000	0.1814	0.4748
2	0.1814	1.0000	0.3985
3	0.4748	0.3985	1.0000

Table 4.3: A table to show the correlation between the three factors.

Table 4.3 shows that there was a weak to moderate correlation between the factors and, therefore, there was an adequate difference between viewpoints. A three-factor solution was accepted as the final solution and met the criteria proposed by Webler et al. (2009):

- Simplicity – the solution consisted of three factors representing 50 per cent of variance.
- Clarity – the final solution consisted of one confounding Q sort and two non-significant Q sorts.
- Distinctiveness – the correlations between factors were weak to moderate (Table 4.3).
- Stability – at least seven Q sorts loaded on to each factor. The final factor solution represented 29 of the 32 Q sorts.

The three-factor solution also met the Scree test and Eigenvalue criteria outlined in section 4.3:

- Each factor had an Eigenvalue of higher than 1.00.
- The final factor solution agreed with the Scree test in Figure 4.1.

The final factor solution is displayed in Table 4.4. As outlined in section 4.3.2, the level of significance for a Q sort to load on a factor was calculated as +0.40. This number was raised to +0.44 to maximise the number of Q sorts loading onto each of the three factors, thereby meeting the aim of representing the views of the majority of the participant group.

Q sort	Factors		
	1	2	3
1	0.25	0.23	0.50
2	0.04	0.66	0.38
3	0.62	0.11	0.22
4	0.74	0.07	0.00
5	0.51	0.06	0.52
6	0.03	0.79	0.10
7	0.75	−0.33	0.06
8	0.27	0.12	0.65
9	0.64	0.15	0.42
10	0.39	0.35	0.48
11	0.18	−0.01	0.82
12	−0.02	0.70	0.24
13	0.43	0.09	0.60
14	−0.12	−0.03	0.59
15	0.72	−0.01	0.33
16	0.71	−0.06	−0.18
17	0.61	0.12	0.38
18	−0.25	0.40	0.55
19	0.53	0.10	0.05
20	0.31	0.75	−0.07
21	0.10	0.76	0.16
22	0.21	0.30	0.59
23	0.56	0.27	0.31
24	0.14	0.39	0.34
25	0.47	−0.21	0.40
26	0.64	0.18	0.26
27	0.34	0.44	0.38
28	0.27	0.08	0.44
29	0.10	0.43	0.51
30	−0.01	0.51	0.13
31	0.14	0.08	0.69
32	0.21	−0.44	0.35
Total Participants	11	7	11
Explained Variance	18%	14%	18%

Table 4.4: A table to show the final factor solution with significantly loading factors.

Key:

Significant loading onto the factor	
Confounding Q sorts	
Non-significant Q sorts	

4.5 Factor Arrays

Factor arrays are produced using PQMethod prior to the interpretation of factors. Factor arrays are based on weighted averages which help to determine the position and ranking of each item (statement) within each factor, as depicted in Table 4.5. The weighted averages are then converted into Z scores, allowing for cross-factor comparisons to be made. The Z scores for each individual item are then used to create a best estimate Q sort, or an item configuration that characterises a factor (Watts & Stenner, 2012). The factor arrays for each factor are presented in Appendix 20 using the fixed normal distribution grid for

Statements	Factor 1		Factor 2		Factor 3	
	Z scores	Rank	Z scores	Rank	Z scores	Rank
1. Young people choose to study courses after year 11 based on their likes and interests.	1.01	2	0.91	2	1.74	3
2. Young people do not know what they want to study or train as at 16.	0.07	0	1.58	3	−0.48	−1
3. Young people should be involved in the design of courses on offer after 16.	0.03	0	0.36	0	0.16	0
4. Young people should not be made to stay on in education or training at 16.	−1.67	−3	−0.34	−1	1.71	3
5. Young people have not been asked if they want to stay on in education or training after year 11.	−1.61	−3	0.17	0	−0.31	−1
6. Educational and training opportunities after year 11 are not suitable.	−1.42	−3	−1.25	−2	−1.32	−2
7. Young people often select a range of courses with no clear career pathway in mind.	−1.11	−2	0.59	1	0.46	1
8. Career guidance and support is poor and not offered early enough.	−0.01	0	2.21	4	−0.29	0
9. There aren’t any work experience opportunities after year 11.	−1.34	−2	0.16	0	−1.77	−3
10. Limited jobs mean young people have to stay on in education longer.	−0.60	−1	0.16	0	0.26	0

11. Young people choose to study at the same place as their friends after year 11.	0.45	1	−1.33	−2	−0.79	−2
12. Family members offer the best advice about what and where to study at 16.	−1.03	−2	−0.62	−1	−0.76	−2
13. There is too much choice, making it hard to choose a suitable course after year 11.	−0.36	0	−0.96	−2	0.64	1
14. Teachers offer the best advice about what and where to study at 16.	0.19	0	−0.51	−1	−0.41	−1
15. Colleges and sixth forms select young people with the highest GCSE grades.	0.28	1	−0.57	−1	0.48	1
16. Staying on in education after year 11 only suits clever young people.	−2.07	−4	−1.83	−3	−1.47	−3
17. Young people who don’t enjoy school do not want to stay on in education after year 11.	0.50	1	1.05	2	1.14	2
18. Independent career advisors are the most helpful.	0.43	1	−0.72	−2	−0.05	0
19. Employers believe that apprenticeships are not as good as A-level qualifications.	0.76	1	0.01	0	−0.75	−2
20. Other places have better educational and training opportunities.	0.22	0	0.57	1	0.56	1
21. Who you know helps you to get a job, not staying on in education or training at 16.	−0.39	−1	−0.18	−1	−0.50	−1

22. Volunteering after year 11 increases your chances of getting a job.	0.86	2	0.23	0	1.36	3
23. A-levels offer a clear pathway to university.	1.82	3	−0.07	0	−0.02	0
24. Apprenticeships, and internships help young people to get a job.	0.64	1	0.25	0	1.79	4
25. There aren't many apprenticeships and internships available.	−0.52	−1	0.53	1	−0.23	0
26. Structured full-time learning opportunities are more suitable at 16.	0.17	0	−0.91	−2	0.20	0
27. Young people should access college earlier to encourage them to stay on in education at 16.	−0.52	−1	0.50	1	−0.30	−1
28. Staying on in education or training after year 11 leads to more qualifications.	1.91	4	0.98	2	1.22	2
29. Staying on in education or training at 16 benefits society.	0.32	1	0.02	0	−0.15	0
30. Staying on in education or training after year 11 leads to a successful career.	1.59	3	−0.70	−1	−0.40	−1
31. Staying on in education and training at 16 increases your chances of getting a job.	1.36	2	0.59	1	0.99	2
32. Leaving school at 16 leads to unemployment.	−0.91	−2	−1.79	−3	−2.56	−4
33. All young people want to stay in education or training after year 11.	−0.83	−2	−2.21	−4	−2.15	−3

34. Colleges promote a young person's learning independence.	0.12	0	1.37	3	0.74	2
35. The decisions made about education at 16 impact on future job opportunities.	1.75	3	0.76	1	0.37	1
36. Academic courses do not provide young people with the skills required for the modern-day job market.	−0.67	−1	0.84	2	−0.35	−1
37. Funding cuts have reduced the variety of courses on offer after year 11.	−0.07	0	1.09	3	0.53	1
38. Young people after year 11 are not given the opportunity to learn vital life skills.	−0.66	−1	0.97	2	−0.82	−2
39. Young people rule out certain education and training providers owing to their poor reputation.	0.82	2	−0.60	−1	0.63	1
40. Schools and education providers work well together to promote clear pathways for young people.	1.19	2	−1.82	−3	0.84	2
41. Male students and female students make different choices about courses available after year 11.	−0.73	−1	0.53	1	0.07	0

Table 4.5: A table to show the Z scores and ranking of each statement within each factor.

4.6 Factor Interpretations

Factor interpretation makes up the final stage of the data analysis in Q methodology. This involves the interpretation of quantitative statistical data into qualitative interpretations. This approach seeks to bring methodological holism, where the entire data set is represented in the viewpoints of each factor (Stephenson, 1936). This stage is driven by the data, adhering to abductive reasoning to maintain objectivity.

The factor interpretation stage can be open to bias and subjectivity. Watts and Stenner (2012) recommend a process to ensure that the researcher's approach to factor interpretation is systematic and methodological, ensuring that the factor arrays govern the process. This process involves several stages to reduce researcher bias and ensures that all items are considered as opposed to only those at the extreme ends. The initial stage involves creating crib sheets for each factor and is recommended by Watts and Stenner (2012) as a helpful first step. The crib sheets will document the following information:

- the items ranked the highest at +4 and items ranked the lowest at −4;
- the items ranked higher in one factor than in other factors; and
- the items ranked lower in one factor than in other factors.

The crib sheets created for each factor can be found in Appendix 19. Qualitative information from the post-sort questionnaire will be considered at this stage to aid the factor interpretation process. Distinguishing statements will also be considered; these are defined as statements ranked significantly differently by one factor than another (Appendix 21). Watts and Stenner (2012) recommend, in addition, that consideration is given to items ranked at zero in relation to their ranking in other factors. This will ensure that zero items are not assumed to represent neutrality and instead are seen as views to the contrary, indicating cautious agreement or disagreement.

In this section, each factor account will present the demographic information, factor arrays and qualitative information from the post-sort questionnaire. These factor accounts will each be accompanied by a qualitative interpretation and a brief summary. The three factor arrays can be viewed in full in Appendix 20.

The statements and their specific ranking within a factor will be referred to throughout this section as so: (4: −3), where the statement/item number is followed by its ranking.

4.6.1 Factor one viewpoint interpretation: Suitable, preferable and enhancing

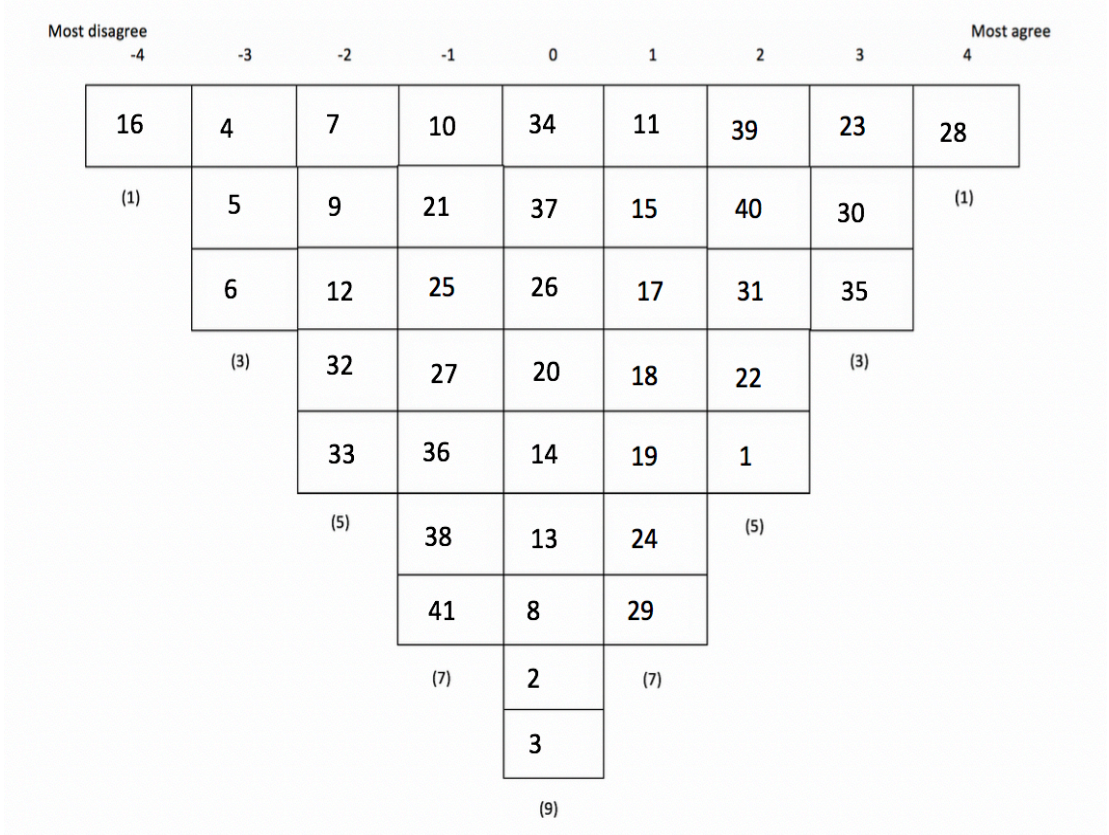

Figure 4.3: A figure to show the model Q sort for viewpoint 1.

4.6.1.a Suitable, preferable and enhancing: Demographic information

Factor one consisted of 11 Q sorts that significantly loaded on to the factor, explaining 18 per cent of the study variance (as shown in Table 4.4). The participants' model Q-set is shown in Figure 4.3. The demographic information of the participants who completed the Q sorts is represented in Table 4.6.

Q sort	Gender	Year group	Ethnicity	School	Plans after year 11
3	Male	11	Black British	G	Sixth form/College
4	Male	11	British Filipino	G	Sixth form
7	Male	11	British Pakistani	B	Sixth form
9	Male	10	British Pakistani	B	Sixth form
15	Male	11	British Bangladeshi	F	Sixth form
16	Male	11	British Pakistani	F	Sixth form
17	Male	11	British Pakistani	F	Sixth form/College
19	Male	10	White British	C	Sixth form
23	Male	10	Mixed	H	College
25	Female	10	British Pakistani	A	Sixth form
26	Female	10	British Pakistani	A	Sixth form

Table 4.6: A table to show the demographics of the participants who completed the Q sorts that significantly load on to factor 1.

The participants who completed the Q sorts that significantly load on to this factor were predominantly male (nine males and two females). The participants attended six of the nine schools (schools A, B, C, F, G and H) with an even mix of year 10s and year 11s (six and five respectively). Four of these schools were academies and two were maintained. The majority of the participants planned to attend sixth form after year 11 (eight participants), two selected both sixth form or college and one selected college. The participants represented a mix of ethnicities, predominantly British Pakistani (six of the eleven).

4.6.1.b Suitable, preferable and enhancing: Qualitative information

The participants that make up this viewpoint held a strong belief that participation in post-16 education and training is the preferred pathway at 16. They felt that 'Staying on in education or training leads to more qualifications', 'increases your chances of getting a job' and 'leads to a successful career' (28: +4, 31: +2, 30: +3). They also felt

strongly that the ‘decisions they were making about education at 16 impacted on their future job opportunities’ (35: +3).

‘The more qualifications you gain, the more jobs you can get.’

(Participant 7, questionnaire)

‘Education from school will help you in the future.’

(Participant 25, questionnaire)

‘Staying on in education or training at 16 increases your chances of getting a job and will help society in the long term.’

(Participant 9, questionnaire)

The participants ranked academic courses highly and felt strongly that ‘A-levels offer a clear pathway to university’ (23: +3).

‘Universities require A-levels and little else.’

(Participant 19, questionnaire)

They accepted that not ‘all young people want to stay on in education’ (33: −2), and this seemed especially relevant to those ‘who don’t enjoy school’ (17: +1). They also did not necessarily agree that ‘leaving school at 16 leads to unemployment’ (32: −2). Despite this, the participants strongly disagreed that young people should be allowed to leave education at 16 (4: −3) and were not of the opinion that ‘Who you know helps you to get a job, not staying on in education or training at 16’ (21: −1).

‘A student’s mentality (whether they want to stay on in post-16 or not) determines their future goals.’

(Participant 18, questionnaire)

‘The decisions made about education at 16 affect your life in a very dramatic way. They change everything.’

(Participant 17, questionnaire)

The participants strongly disagreed that ‘Staying on in education after year 11 only suits clever young people’ (16: −4) and that ‘Educational and training opportunities after year 11 are not suitable’ (6: −3).

‘All people can stay on in education after year 11 no matter their intelligence. Education is about expanding their knowledge and if it only suits clever people there won’t be much to teach.’

(Participant 26, questionnaire)

‘Clever does not translate to capable and not very academic does not translate to incapable.’

(Participant 17, questionnaire)

They also believe that their voices have been heard, strongly disagreeing with the statement ‘Young people have not been asked if they want to stay on in education or training after year 11’ (5: −3).

For these participants, post-16 opportunities are seen as a way of preparing young people for employment, marked by their disagreement with the statement ‘Academic courses do not provide young people with the skills required for the modern-day job market’ (36: −1). Furthermore, it is implied that opportunities are appropriate, as these participants disagree with the following statements: ‘There aren’t many apprenticeships, internships and work experience opportunities’ (9: −2, 25: −1); ‘Limited jobs mean young people have to stay on in education longer’ (10: −1); and ‘Funding cuts have reduced the variety of courses on offer’ (37: 0). Instead, they feel that ‘Schools and education providers work well together to promote clear pathways for young people’ (40: +2). They do not feel strongly either way about ‘being involved in the design of courses on offer’ (3: 0).

In addition, work experience whilst studying is acknowledged as vital to securing employment, with participants agreeing that ‘Volunteering after year 11 increases your chances of getting a job’ (22: +2).

This viewpoint shows a preference for ‘full-time learning opportunities at 16’ (26: 0) and believes college to be a suitable option at 16, as opposed to ‘accessing college

earlier to encourage them to stay on in education at 16' (27: −1). It also questions whether college prepares young people for the future, cautiously disagreeing that 'Colleges promote a young person's learning independence' (34: 0):

'Most young people want to go to college as they have more freedom but sometimes the freedom could lead to students not studying as hard.'

(Participant 3, questionnaire)

When considering the opportunities available post-16, it is recognised that 'Colleges and sixth forms select young people with the highest GCSE grades' (15: +1) and 'Employers believe that apprenticeships are not as good as A-level qualifications' (19: +1). It appears too that 'Young people rule out certain education and training providers owing to their poor reputation' (39: +2).

The decisions children make about post-16 opportunities are 'based on their likes and interests' (1: +2), their gender appearing not to play a role in the 'decisions they make about courses available' (41: −1). Young people do not, therefore, 'select a range of courses with no clear career pathway in mind' (7: −2); however, they may 'choose to study at the same place as their friends' (11: +1).

'Colleges are not what make people stay, it is all about their motivation and aspirations.'

(Participant 3, questionnaire)

'I think most people have their best intentions in mind and place their friends after their education.'

(Participant 19, questionnaire)

This viewpoint cautiously disagrees that 'Career guidance and support is poor and not offered early enough' (8: 0). The participants specify that 'Independent career advisors are the most helpful' (18: +1) and cautiously agree that 'Teachers offer the best advice about what and where to study' (14: 0). They do not feel that 'Family members offer the best advice about what and where to study' (12: −2).

4.6.1.c. Suitable, preferable and enhancing: Summary

Staying on in education or training after 16 is seen as a suitable option for all, though it may not be the preferred option for some. Moreover, academic courses, for example A-levels, secure the pathway to university and future employment. Children, on the whole, have a clear idea about what they would like to do. They believe that they are informed and that there are options available to them.

4.6.2 Factor two viewpoint interpretation: Unsuitable and impractical but preferred

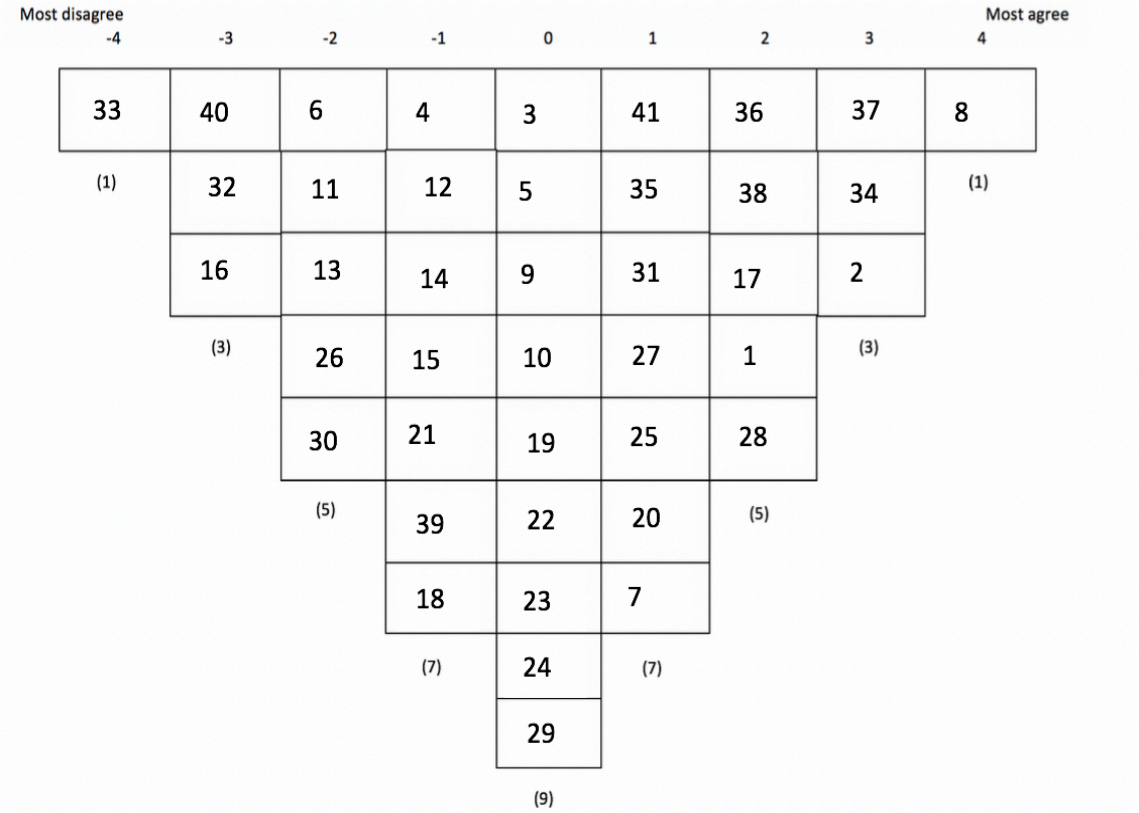

Figure 4.4: A figure to show the model Q sort for viewpoint 2.

4.6.2.a Unsuitable and impractical but preferred: Demographic information

Factor two had 7 Q sorts that significantly loaded on to the factor, explaining 14 per cent of the study variance (as shown in Table 4.4). The participants' model Q-set is

shown in Figure 4.4. The demographic information of the participants who completed the Q sorts is represented in Table 4.7.

Q sort	Gender	Year group	Ethnicity	School	Plans after year 11
2	Female	11	White British	D	Sixth form
6	Female	11	British Indian	B	Sixth form/college
12	Female	11	White British	D	College
20	Male	10	White British	C	Sixth form
21	Female	11	White British	C	College
27	Female	11	British Kashmiri	A	Sixth form
30	Female	10	British Pakistani	E	Not known

Table 4.7: A table to show the demographics of the participants who completed the Q sorts that significantly load on to factor 2.

Table 4.7 shows that the participants who completed the Q sorts that significantly load on to this factor were predominantly female (six females, one male). The participants attended five of the nine schools (schools A, B, C, D and E) and were predominantly in year 11 (five of the seven). Three of these schools were academies, one was maintained, and one was a free school. Three of the participants planned to attend sixth form after year 11, two selected college, one selected both sixth form or college and one participant did not know. Over half of the participants identified themselves as White British (four of the seven).

4.6.2.b Unsuitable and impractical but preferred: Qualitative information

The participants that make up this viewpoint strongly believe that ‘Career guidance and support is poor and not offered early enough’ (8: +4). They disagree that ‘Independent career advisors’ and ‘Teachers are helpful’ (18: −1; 14: −1). They also do not think that ‘Schools and education providers work well together to promote clear

pathways' (40: −3), leading to confusion about 'what they want to study or train as' (2: +3). It is felt that 'a range of courses are selected with no clear career pathway' (7: +1).

'I didn't get told anything about how or when to apply or go to open days.'

(Participant 21, questionnaire)

'I know what I want to study and train as at 16, but a lot of my friends don't.'

(Participant 6, questionnaire)

'I think it is too early to ask teens what they want to.'

(Participant 20, questionnaire)

'Young people… have difficulty finding the right career path… they need support and an outline of what they can do.'

(Participant 27, questionnaire)

Moreover, the participants appear unsure about the benefits of post-16 opportunities, cautiously disagreeing with the following statements: 'Volunteering, Apprenticeships, and internships help to you get a job' (22: 0, 24: 0), 'A-levels offer a clear pathway to university' (23: 0) and 'Staying on in education or training at 16 benefits society' (29: 0). However, they also disagree with the view that 'Who you know helps you to get a job, not staying on in education or training at 16' (21: −1):

'I was very confused about how jobs, A-levels and basically after year 10 worked. And then when I was in year 10 everything was too much to take in.'

(Participant 30, questionnaire)

'A lot of people feel lost and confused and need guidance as well as to gain independence.'

(Participant 6, questionnaire)

In addition to feeling uninformed, participants believe that ‘There aren’t many apprenticeships, internships or work experience opportunities’ (25: +1, 9: 0). They agree that ‘Funding cuts have reduced the variety of courses on offer’ (37: +3), ‘Other places have better opportunities’ (20: +1) and ‘Limited jobs mean young people have to stay on’ (10: 0). They did not feel that ‘too much choice made it hard to choose a suitable course’ (13: −2). These participants did not feel strongly either way about ‘being involved in the design of courses on offer’ (3: 0).

‘It depends on the type of school you go to as what is available. Private and outstanding schools offer better opportunities to learn about different careers and have opportunities to explore things.’

(Participant 27, questionnaire)

They believe that children ‘are not given the opportunity to learn vital life skills’ (38: +2) as a result of ‘Academic courses’ not equipping them ‘with the skills required for the modern-day job market’ (36: +2):

‘Schools do not equip students with the right character skills for the outside working world.’

(Participant 27, questionnaire)

These participants strongly disagree that ‘All young people want to stay in education or training after year 11’ (33: −4), especially those ‘who don’t enjoy school’ (17: +2). They did recognise the importance of the decisions they were making, agreeing that ‘decisions made about education at 16 impact on future job opportunities’ (35: +1):

‘If you leave school at 16 quite a few opportunities can pop up for you.’

(Participant 20, questionnaire)

‘The choices you make after year 11 lead to opportunities in the future and a lot of people studying at university or in a job aren’t happy.’

(Participant 6, questionnaire)

Participants also cautiously agree that ‘Young people have not been asked if they want to stay on’ (5: 0):

‘I think that the student will have the best idea of the right choices to make… Many of my friends want to go out and find their place in the world! Education should be appreciated, not used to restrict young people.’

(Participant 2, questionnaire)

They agree, however, that ‘Staying on in education and training at 16 increases your chances of getting a job’ (31: +1) and ‘leads to more qualifications’ (28: +2), but do not feel that this necessarily ‘leads to a successful career’ (30: −1) or that ‘Leaving school at 16 leads to unemployment’ (32: −3). Despite acknowledging that there may be other fruitful options at 16, they disagree with young people being allowed to leave education at 16 (4: −1).

Participants do not agree that ‘opportunities after year 11 are not suitable’ (6: −2) and that post-16 education only ‘suits clever young people’ (16: −3):

‘Even if you are not super clever you can still get into colleges, apprenticeships or internships.’

(Participant 12, questionnaire)

‘…I think it depends on how determined and committed you are. I think it also depends on your character and if you have the qualities that suit an educational environment rather than your academic intelligence.’

(Participant 27, questionnaire)

Interestingly, these participants see employers as selective, agreeing that ‘apprenticeships are not as good as A-level qualifications’ (19: 0). Despite this, they do not see education providers as selective, disagreeing that ‘young people with the highest GCSE grades’ are selected (15: −1). Young people also do not appear to be selective when choosing an education provider, stating that they would not rule out providers due to their poor reputation (39: −1).

Participants believe that course selection is ‘based on their likes and interests’ (1: +2) and that gender influences the choices they make (41: +1). They do not, however, believe that friends influence the choices they make (11: −2):

‘Young people know the kinds of subjects they are interested in or skills they are good at…’

(Participant 27, questionnaire)

They suggest that ‘Young people should access college earlier to encourage them to stay on in education’ (27: +1), seeing college as ‘promoting a young person’s learning independence’ (34: +3).

4.6.2.c Unsuitable and impractical but preferred: Summary

Post-16 opportunities are limited and perhaps unsuitable. Career guidance is also lacking, making it difficult for children to make informed decisions about career pathways. Children may also wish to leave education at 16 and this may be a successful route for some. However, remaining in education at 16 is likely to be the most beneficial option.

4.6.3 Factor three viewpoint interpretation: Beneficial but an unnecessary requirement

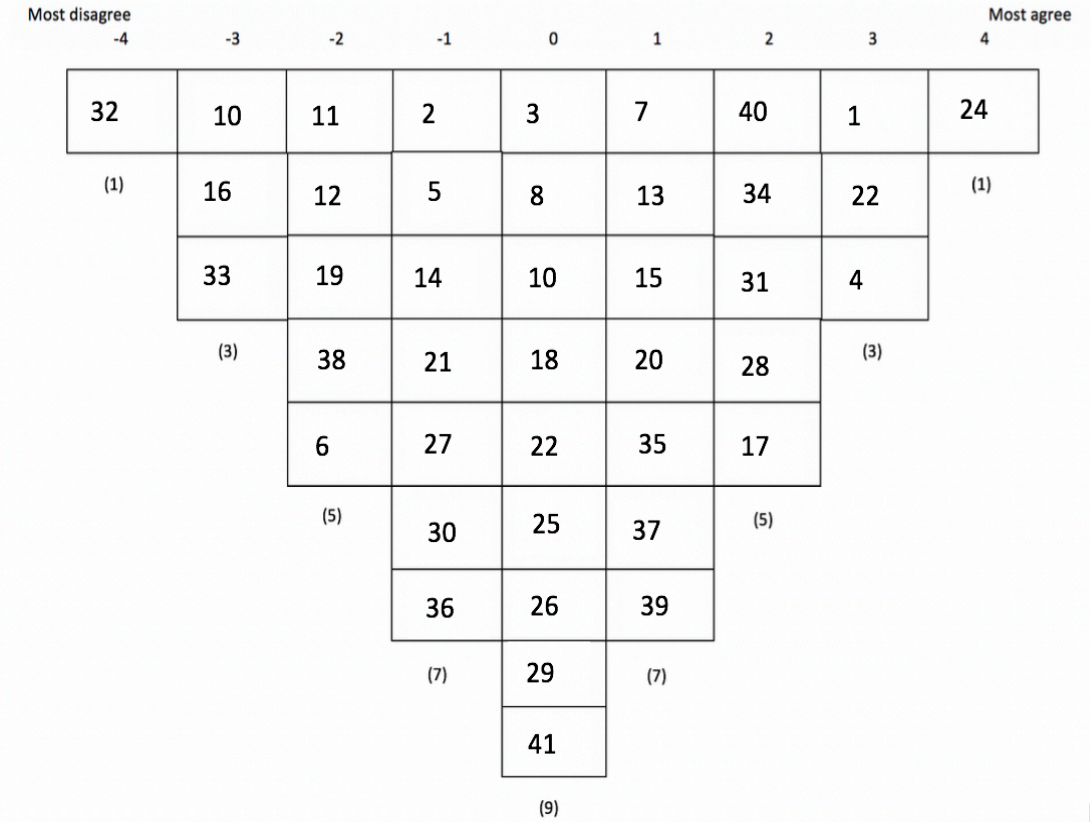

Figure 4.5: A figure to show the model Q sort for viewpoint 3.

4.6.3.a Beneficial but an unnecessary requirement: Demographic information

Factor two had 11 Q sorts that significantly loaded on to the factor, explaining 18 per cent of the study variance (as shown in Table 4.4). The participants' model Q-set is shown in Figure 4.5. The demographic information of the participants who completed the Q sorts is represented in Table 4.8.

Q sort	Gender	Year group	Ethnicity	School	Plans after year 11
1	Female	11	White British	G	Sixth form
8	Female	10	White British	B	Sixth form/College
10	Female	10	White British	D	Sixth form
11	Male	11	White British	unknown	Apprenticeship
13	Male	11	British Pakistani	F	Sixth form
14	Male	11	British Pakistani	F	College
18	Male	11	White British	C	College
22	Female	11	White British	H	Apprenticeship
28	Female	11	British Black Caribbean	E	Internship
29	Female	10	White British	I	College
31	Male	10	British Pakistani	I	Not known

Table 4.8: A table to show the demographics of the participants who completed the Q sorts that significantly load on to factor 3.

Table 4.8 shows that the participants who completed the Q sorts that significantly load on to this factor were a balance of genders (six females, five males). The participants attended the majority of the schools (B, C, D, E and G, H and I) and were predominantly in year 11 (seven of the eleven participants). Four of these schools were academies, two were maintained and one was a free school. The participants in this group had a range of plans after year 11: three planned to attend sixth form, three planned to attend college, two selected apprenticeship and one an internship, one selected both sixth form and college, and one participant did not know. Over half of the participants identified themselves as White British (four of the seven).

4.6.3.b Beneficial but an unnecessary requirement: Qualitative information

The participants that form this viewpoint agree that 'Staying on in education or training after year 11 leads to more qualifications' and 'increases your chances of getting a job' (28: +2, 31: +2). More importantly, they see the benefits of 'Apprenticeships, internships and volunteering' in securing employment (24: +4, 22: +3) and disagree that 'Employers believe that apprenticeships are not as good as A-level qualifications' (19: −2). They agree that 'The decisions made about education at 16 impact on future job opportunities' (35: +1):

'If you get experience in a job, you'll probably be able to get the job.'
(Participant 31, questionnaire)

They disagree with the statement 'Who you know helps you to get a job, not staying on in education or training at 16' (21: −1).

They also disagree that 'opportunities after year 11 are not suitable' (6: −2) and that staying on 'only suits clever young people' (16: −3):

'Anyone can choose to do further education, clever or not – it shouldn't be limited.'
(Participant 8, questionnaire)

'You don't need to be smart to want to stay on in education, some want it for other reasons.'
(Participant 10, questionnaire)

The participants strongly disagree that 'There aren't any work experience opportunities' (9: −3) and that 'Young people are not given the opportunity to learn vital life skills' (38: −2).

They also disagree that 'Academic courses do not provide young people with the skills required for the modern-day job market' (36: −1). However, they cautiously disagree that 'A-levels offer a clear pathway to university' (23: 0).

Participants agree that ‘Colleges promote a young person’s learning independence’ (34: +2) and do admit that ‘Structured full-time learning opportunities’ are the better option (26: 0). However, they do not agree that ‘college should be accessed earlier to encourage them to stay on in education at 16’ (27: −1).

The participants believe that ‘Funding cuts have reduced the variety of courses on offer’ (37: +1) and ‘Other places have better opportunities’ (20: +1). They also cautiously agree that ‘Limited jobs mean young people have to stay on in education longer’ (10: 0). They do not feel strongly either way about ‘being involved in the design of courses on offer’ (3: 0):

‘Young people are not given enough opportunities to explore post-16 options.’
(Participant 10, questionnaire)

‘If there isn’t any courses that appeal to you won’t want to go there.’
(Participant 22, questionnaire)

They also suggest that ‘Colleges and sixth forms select young people with the highest GCSE grades’ (15: +1).

Participants feel that ‘Young people choose to study courses based on their likes and interests’ (1: +3) rather than ‘choosing to study at the same place as their friends’ (11: −2). It is therefore disputed that young people ‘do not know what they want to study or train as’ (2: −1):

‘Most people have a rough idea of what they enjoy in my year and are planning to pursue that in college.’
(Participant 8, questionnaire)

‘If students are made to stay after year 11, they will start to really work hard to get the qualifications they need to leave.’
(Participant 29, questionnaire)

They appear to feel that ‘a range of courses are selected with no clear career pathway in mind’ (7: +1), but that ‘clear career pathways are promoted’ (40: +2) and career guidance is adequate (8: 0):

‘I struggle with making decisions, this makes it more difficult when there is too much choice.’

(Participant 1, questionnaire)

Participants indicated that ‘Independent career advisors are the most helpful’ (18: 0) when considering options at 16 as opposed to ‘Family members’ and ‘Teachers’ (12: −2, 14: −1):

‘Parents will usually offer outdated information.’

(Participant 18, questionnaire)

Of particular interest, this viewpoint strongly disagrees that ‘All young people want to stay in education or training after year 11’ (33: −3), accepting that whose ‘who don’t enjoy school do not want to stay on’ (17: +2). Indeed, these participants strongly agree that ‘Young people should not be made to stay on’ (4: +3).

‘Young people should be able to leave school and get a job at 16.’

(Participant 11, questionnaire)

‘I have people in my family that are successful and left school early.’

(Participant 14, questionnaire)

‘I believe that people should not be forced into education as they have free will.’

(Participant 18, questionnaire)

‘Education isn’t for everyone.’

(Participant 28, questionnaire)

They vehemently deny that ‘Leaving school at 16 leads to unemployment’ (32: −4) and cautiously disagree that ‘staying on is beneficial for society’ (29: 0).

4.6.3.c Beneficial but an unnecessary requirement: Summary

Work-based opportunities are the most beneficial at 16 in securing future employment, though other opportunities are not discounted. Children are driven by their likes and interests; however, it can be difficult to make choices at 16. The right to leave education at 16 should remain a choice to meet the needs of those who have other plans.

4.7 Consensus Statements

A consensus statement can be defined as an item in the data with a significant level of agreement across all factors. This indicates that all factors contain Q sorts that loaded an item in a similar way. In this study, there are six consensus statements: one item was non-significant at $p>0.01$ and five items were non-significant at $p>0.05$ (marked as *). The items were categorised under certain themes along with the factor arrays for each factor.

Three items related to the post-16 provision on offer:

3* Young people should be involved in the design of courses on offer (0, 0, 0)

6* Educational and training opportunities after year 11 are not suitable (−3, −2, −2)

20* Other places have better educational and training opportunities (0, 1, 1)

Two items related to societal views and perspectives:

21* Who you know helps you get a job, not staying on in education at 16 (−1, −1, −1)

29 Staying on in education or training at 16 benefits society (1, 0, 0)

One item related to careers advice:

12* Family members offer the best advice about what and where to study at 16 (−2, −1, −2)

It is recommended that the consensus statements be considered in the context of the overall interpretation, specifically in relation to the factors, as the same item may relate

to different aspects of meaning (Webler et al., 2009). The consensus statements were therefore not considered in isolation and were interpreted in the context of the factor or viewpoint to ascertain their specific meaning.

4.8 Non-significant and Confounding Q Sorts

Of the Q sorts, two were found to be non-significant and one confounding. Non-significant Q sorts are sorts that do not load on to a factor at a significance level of +0.44. A confounding Q sort is a sort which significantly loads on to two or more factors. The Q-sort process involves exploring the views of all participants; therefore, each Q sort will be considered individually by looking specifically at items ranked at +4, +3 , −4 and −3. The qualitative information provided in the post-sort questionnaire will also be considered to ascertain whether these views were unique or hybrid views of the viewpoints identified in the three factors.

Q sorts 24 and 32 were found to be non-significant and would not have loaded on to a factor, even if the significance level had remained at +0.40. This may suggest that their views differ significantly from the three viewpoints identified.

The participant who completed Q sort 24 appeared to have a slightly different viewpoint to those already identified. She strongly agreed that 'young people should access college earlier to encourage them to stay on' (27: +4), adding the following qualitative comment:

> '…then more students understand what it is like to go to college and have that experience before deciding.'
>
> (Participant 24, questionnaire)

Other participants did not appear to have the same level of agreement, highlighting the need to explore in more depth the Q sorts that do not demonstrate a significant level of agreement. This is indicative of the subjective and interpretative nature of the Q-sorting activity and the ability of the methodology to recognise divergent and minority views.

Q sort 32 did meet the significance level; however, it presented as a minus, suggesting it may have been a bipolar sort. A bipolar sort can be described as a mirror image of the viewpoint represented by the factor. On closer examination, it appeared that the Q sort was not in fact bipolar but a viewpoint that appeared to be a hybrid view of factors one and two. In that, she strongly agreed that career guidance is poor – in agreement with factor two. Furthermore, the participant who completed the Q sort strongly agreed that young people should not be given the choice of whether to stay on after year 11, implying that staying on is the preferred and best option. This view appears to be in agreement with factors one and two which both suggest that staying on in education or training post-16 is the best option for all young people. The participant did not leave any additional qualitative information on the post-sort questionnaire, making it difficult to interpret her view in depth.

Q sort 5 was found to be confounding, significantly loading on to factors one and three. Q sort 5 appeared to be a hybrid view, agreeing with factor one that A-levels offer a clear pathway to university and that the decisions you make at 16 impact on future job opportunities. The participant who completed this Q sort also agreed with elements of factor three, expressing the view that colleges do not pick young people with the highest GCSE grades and that apprenticeships and A-levels are equally valid to employers. Furthermore, he strongly agreed that other places have better education and training opportunities, adding:

> ‘I agree with this and feel it is not being voiced enough…’
>
> (Participant 5, questionnaire)

4.9 Summary of the Results

The 32 completed Q sorts, when analysed, produced a three-factor solution. The three-factor solution represented the views of 29 participants and adhered to a number of strict criteria, suggesting it was the most viable solution. The factors were interpreted to represent three distinct viewpoints:

1. *Suitable, preferable and enhancing*;

2. *Unsuitable and impractical but preferred*; and

3. *Beneficial but an unnecessary requirement*.

The Q sorts that were found to be confounding and non-significant were also interpreted separately and revealed viewpoints that were hybrids of the three factors, as well as a unique perspective offered by Q sort 24. The data analysis process also reported six consensus statements, revealing some commonalities between the three factors. This can be explained by the moderate correlation shown between the factors and also by the variety offered within each factor or viewpoint.

5. Discussion

5.1 Introduction to the Discussion

The research aimed to explore the viewpoints of KS4 pupils regarding post-16 education and training opportunities. This chapter will discuss the findings and is divided into the following sections:

- Summary of the Research Findings;
- Exploration of the Research Findings in Relation to the Existing Literature;
- Assessment of Methodological Quality;
- Implications for Professional Practice;
- Implications for Future Research; and
- Conclusions.

5.2 Summary of the Research Findings

What are the viewpoints of Key Stage Four pupils regarding post-16 education and training opportunities?

The researcher selected a Q-methodological approach to answer the research question. This involved 32 participants who sorted a 41-item Q set, generated from a review of the literature, interviews with LA managers and a focus group with year 10 pupils. The data analysis of the participants' completed Q sorts led to the creation of a three-factor solution. Factors were interpreted to reveal three viewpoints relating to how KS4 pupils view post-16 education and training opportunities:

- Viewpoint one: *Suitable, preferable and enhancing*;
- Viewpoint two: *Unsuitable and impractical but preferred*; and
- Viewpoint three: *Beneficial but an unnecessary requirement*.

The three distinct viewpoints demonstrate both differences among pupils and differences between KS4 pupils and policymakers who have made assumptions about their beliefs regarding post-16 education and training opportunities. This serves to

highlight how pupils perceive post-16 provision, support and guidance, and remaining in education post-16 differently, and suggests that the current post-16 offer may not be equally valued by all.

The three-factor solution was selected on the basis that it offered stability, distinctiveness, clarity and simplicity (Webler et al., 2009). The Q-methodological approach revealed majority viewpoints and exposed distinctive differences amongst these viewpoints. The researcher took additional steps to ensure the viewpoints were distinct and different by increasing the significance level of the Q sorts that loaded on to each factor, from +0.40 to +0.44.

The researcher could have selected a higher-factor solution when taking into account the Kaiser-Guttman criterion, the 'two or more significantly loading Q sorts' criterion and the Scree test criterion, as discussed in section 4.3. However, a three-factor solution was selected as it represented 50 per cent of the variance whilst still ensuring the inclusion of a wide range of views.

Whilst the factors identified can be considered to be distinct and divergent, the data analysis did also reveal the existence of some shared perspectives – best indicated through the highlighted 'consensus statements', which are considered in the overall context of each viewpoint.

The research findings will now be considered in the light of existing literature and research in the area.

5.3 Exploration of the Research Findings in Relation to the Existing Literature

Findings from the narrative literature review suggested that participation in post-16 education and training was beneficial for all children, leading to the introduction of the Education and Skills Act 2008 (Bono & Galindo-Rueda, 2006; Bynner, 2004; DfES, 2007a; DCSF, 2008; Iannelli & Paterson, 2005). International research supporting the change in legislation and subsequent research, however, noted several potential challenges including a lack of suitable pathways, implying that the needs of children may be unmet (Bradford Council, 2015; Spielhofer et al., 2009).

The importance of capturing and incorporating the views of children into the decision-making process regarding the design of education provision is often promoted in the literature (Hart, 1992; McLarty & Moran, 2009; Widdowson, 2018). The systemic literature review therefore explored the views of secondary-aged pupils regarding post-16 provision and found that these were varied and differed from the prominent view noted in key policy documents (Worth, 2002).

Each viewpoint will now be presented in turn in and considered in relation to the key findings from the literature.

5.3.1 Viewpoint 1: Suitable, preferable and enhancing

The participants representing viewpoint 1 appear to support the majority of the assumptions made by policymakers, the findings supporting the legislation change, and the views of some children noted in the systematic literature review (Bono & Galindo-Rueda 2006; Iannelli & Paterson, 2005; Mannion, 2002; Swift, 2009; Worth, 2002). This is evidenced by their view that post-16 education and training is suitable for all children and therefore children should remain in education to secure further qualifications and future employment; their belief that A levels are the pathway to university; their acknowledgement that courses are selected based on their likes, interests and aspirations; and their agreement that children are offered appropriate careers advice and coordinated career pathways. This viewpoint does, however, also align with the finding of Haywood et al. (2009) that some children may find 'staying on' difficult if they have developed a dislike of school. In addition, it supports the view that opportunities available post-16 are competitive and employers prefer A-level qualifications and degrees (Blenkinsop, McCrone, Wade & Morris, 2006).

In light of the literature, the participants representing this view may be said to believe that post-16 education and training opportunities provide the chance for all children to exercise independence, follow their aspirations, and hone and develop their skills in preparation for higher education, employment and their transition to adulthood. Therefore, post-16 opportunities are seen as fruitful and enhancing, in promoting their progress towards their chosen career or occupation.

5.3.2 Viewpoint 2: Unsuitable and impractical but preferred

The participants representing this viewpoint appear to support certain assumptions made by policymakers, for example that remaining in education or training beyond 16 is the better option for all children, but question other assumptions, for example that post-16 education supports children to reach their potential (DfES, 2007a; DCSF, 2008). This is evidenced by their belief that children should remain in education or training as it is suitable for all; their acknowledgement that there is a lack of suitable opportunities and appropriate careers guidance; their agreement that children who do not like school may wish to leave; and their disagreement that engagement in post-16 education and training leads to a successful career and benefits society. This viewpoint might be said to resonate with other findings in the literature which identify the challenges that recent changes may have brought about regarding fulfilling children's needs, for example a lack of suitable pathways and adequate guidance, and the idea that some children will gain very little from post-16 education or training (Bradford Council, 2015; Mannion, 2002; Spielhofer et al., 2009; Widdowson, 2018; Wolf, 2010).

In light of the literature, participants representing this viewpoint seemingly perceive the current post-16 provision and process to be unsuitable and impractical, potentially causing confusion and scepticism regarding the benefits of these opportunities. Therefore, one might conclude that whilst some children view post-16 opportunities as the *preferred* option, they can also see the limitations of these opportunities when making plans to support their career aspirations.

5.3.3 Viewpoint 3: Beneficial but an unnecessary requirement

This viewpoint supports the assumption made by policymakers that post-16 opportunities are suitable and beneficial for all children (Bono and Galindo-Rueda 2006; Iannelli and Paterson, 2005). However, it also challenges the assumption that remaining in education or training post-16 should be the only option (DfES 2007a; DCSF, 2008). This is evidenced by their view that though children are driven by their likes and interests, making decisions about post-16 opportunities can be difficult;

their agreement that children who do not like school may wish to leave; their belief that 'staying on' is suitable for all (especially work-based opportunities) and can lead to acquiring further qualifications and employment; their acknowledgement that opportunities may be limited; and their disagreement with children being made to stay on in education post-16. The viewpoint thus appears to support the finding of Villeneuve-Smith, Marshall & Munoz (2007) that children are in favour of retaining the right to leave education, as well as the findings of Swift (2009) and Worth (2002) that further education may not lead to a successful career. This viewpoint also concurs with other findings in the literature that children have an idea of who they want to be but may struggle to make decisions independently (Worth, 2002), especially where their choice is restricted (Spielhofer et al., 2009) or where the options available do not conform with their wish to find their own way, explore the world and gain employment (Blakemore, 2018; Diment, 2009).

In light of the literature, this may mean that participants representing this viewpoint believe that post-16 work-based opportunities are beneficial but that being *compelled* to 'stay on' in education or training at 16 may restrict a child's ability to exercise autonomy and fulfil their aspirations via other means.

5.3.4 Consensus statements

The following items are consensus statements that represents a view shared by all participants and which has not been previously discussed in relation to each viewpoint. The first consensus statement represents a significant disagreement with:

> Family members offer the best advice about what and where to study at 16 (12: −2, −1, −2)

This challenges the view that families influence children's decisions regarding post-16 opportunities (Blenkinsop, McCrone, Wade, and Morris, 2006) and provides support for other findings in the literature which suggest that independent careers advice may be more effective (DfES, 2007a; Payne, 2003).

The second consensus statement represents a shared view that participants neither agreed nor disagreed with:

Young people should be involved in the design of courses on offer (3: 0, 0, 0)

This appears contrary to legislative guidance (Bradford Council, 2015 Children's Commissioner, 2007; DfE and DoH, 2014; Hart, 1998; Sheir, 2001) stating that children should be involved in the planning and design of educational provision. It also offers a differing perspective to that represented in the literature that children should be part of the decision-making process regarding local provision (McLarty and Morran, 2009).

5.3.5 An interpretation of viewpoints in relation to the models of participation

The disparities among children and between children and policymakers, who have made assumptions about their beliefs, raise the question of whether children feel they have been heard or considered in the decision-making process relating to post-16 education and training opportunities. This seems particularly important given that the participants did not hold a strong opinion regarding their involvement in post-16 provision design.

It is often said in the literature that capturing and incorporating children's views into the decision-making process is imperative when designing education provision to suit the needs of children (DfE and DoH, 2014; McLarty & Moran, 2009). To explore this further, it would be helpful to refer back to Hart's (1992) Ladder of Participation model and Shier's (2001) Pathways to Participation model. The findings will therefore now be presented in relation to these two models, examining the role children have played to date in decisions relating to post-16 education and training.

5.3.5.a Hart's (1992) Ladder of Participation and Shier's (2001) Pathways to Participation models

Participants representing viewpoint 1 believe that children have been asked if they want to remain in education or training post-16 and agree that children should 'stay

on'. According to Hart's (1992) model, this suggests that children have been consulted and share the views of adults making important decisions. It would seem that children feel supported to express their views, which is marked on Shier's (2001) model as the minimum requirement that must be achieved to meet the UNCRC (1989). This viewpoint therefore challenges findings in the literature that indicate that children's 'rights to be heard' are violated in this area (Hart, 1992; Widdowson, 2018). Indeed, this viewpoint implies that *some* children do feel a sense of control and autonomy during the process and are therefore perhaps more willing to explore and engage in post-16 opportunities than some have feared.

Conversely, participants representing viewpoint 2 appear to believe that they have not been asked about their views, although they do agree that children should remain in education or training beyond 16. When considering this viewpoint in relation to Hart's (1992) and Shier's (2001) models, it would seem that children feel they have not been heard, nor have they participated in the decision-making process. This viewpoint is in line with findings reported in the literature which indicate that children's views on the matter are not always heard and hence their needs are going unmet (Widdowson, 2018), and that children are only infrequently asked to express their views by policymakers (Chamberlain, Golden & Bergeron, 2011). That this viewpoint is being held may suggest that some children feel sceptical about the benefits of staying on in education or training, which may in turn leave them feeling detached from the process and from post-16 opportunities.

Viewpoint 3 takes a differing position. The participants believe that they *have* been consulted about whether they want to remain in education. However, in light of legislation changes compelling all children to remain in education or training until the age of 18, it would seem that the view of these children, who believe that remaining in education or training post-16 is not necessary, have not been heard. According to Hart's (1992) model, it would appear that the opinion here is that children's views are heard but are not taken in to account, which is classed by Hart as 'manipulation'. Similarly, according to Shier's (2001) model, the children's views have been gathered but have not informed the decision-making process. This may leave children feeling powerless, controlled and ignored, which may restrict their interest and willingness to engage in education or training beyond 16.

5.3.6 Summary of the findings in relation to the literature

This research offered a unique perspective in that it explored the views of KS4 pupils and their role in the decision-making process following the full implementation of legislative changes in 2015. The findings in this research appeared, in part, to be in line with the existing literature, but ultimately represent a mixture of views relating to post-16 opportunities. Of particular importance, the research found polarising views among KS4 pupils and between KS4 pupils and policymakers. The findings also suggest that children's views on this matter have not been considered in the decision-making process, and that the assumptions that have apparently been made about their views have the potential to undermine the efficacy of practice in this area.

5.4 Assessment of Methodological Quality

This section will explore the strengths and limitations of this research in relation to quality assessment indicators. This process ensures the strengths and limitations of the research design are considered.

Q methodology is a qualiquantological approach, meaning it innovatively combines the elements of both qualitative and quantitative research methods (Shemmings, 2011) to elucidate the complementary aspects of the same phenomenon being explored (Lincoln & Guba, 1985). In light of this and as previously mentioned in section 3.7, the research will be discussed in relation to qualitative and quantitative quality assessment indicators.

5.4.1 Qualitative quality indicators

Lincoln and Guba (1985) developed a framework of quality indicators to support researchers in assessing the value, consistency, neutrality and applicability of qualitative research. The quality indicators used in this research are outlined in Table 5.1. This is followed by a detailed description of the strengths and limitations of this research in relation to the quality indicators.

Quality Indicator	Description of Indicator	Criteria for Establishing Indicators
Credibility	All evidence is provided in detail and accurately supports what was studied.	• Prolonged Engagement • Persistent Observation • Triangulation • Peer Debriefing • Negative Case Analysis • Referential Adequacy • Member Checking
Transferability	Contextual information is provided to show that the findings may be applicable to other contexts.	• Thick Description
Dependability	A detailed approach is documented so that the research can be repeated or replicated.	• Inquiry Audit
Confirmability	The findings represent information gathered from the participants and not an interpretation of the researcher which may introduce bias.	• Confirmability Audit • Audit Trail • Triangulation • Reflexivity

Table 5.1: A table to show the quality indicators for qualitative research in relation to the current research.

5.4.1.a Credibility

5.4.1.a i Prolonged Engagement and Persistent Observation

The researcher is required to spend sufficient time exploring the topic of interest to understand it in detail, allowing for the identification of elements that require further exploration (Lincoln & Guba, 1985). A number of steps were taken to help the researcher familiarise herself with the topic area. Initially, the researcher met with a specialist senior EP who had knowledge of post-16 processes and provisions specific to the area where the research was to be conducted. At the same time, the researcher conducted a systematic review of the literature relating to the topic area, developing a clear rationale for her research, as detailed in chapter 2.

5.4.1.a ii Triangulation, Peer Debriefing, Negative Case Analysis and Referential Adequacy

Statements were derived from a variety of sources including interviews, a focus group, peer-reviewed articles, grey materials, websites and blogs. This information was triangulated and grouped into themes using a systematic process to ensure the Q sort represented a rich, comprehensive and well-developed concourse. Q methodology, however, makes no claims to be exhaustive; therefore, it is acceptable for the Q-set to be broadly representative of the concourse (Watts & Stenner, 2012). The three viewpoints are presented incorporating the statistical analysis and qualitative interpretations to provide a rich and detailed description. Qualitative information for the post-sort questionnaires supplemented these viewpoints and enabled the researcher to triangulate information when interpreting the viewpoints.

The researcher engaged in discussion with peers, exploring the aspects of the data to test emergent hypotheses and to uncover any biases that had been taken for granted. This process is known as peer debriefing (Lincoln & Guba, 1985). Deviant case analysis was undertaken to account for elements of the data that did not support patterns emerging in the data analysis. This process also ensured that any archived data not analysed was revisited to explore its meaning. The researcher documented all findings, including those found to be non-significant and presented these in light of

the overall findings. A closer examination of the data not adhering to these patterns was conducted, incorporating qualitative information from the post-sort questionnaire to create individual interpretations. This process is known as referential adequacy (Lincoln & Guba, 1985).

5.4.1.a iii Member Checking

Member checking is a process whereby the findings are tested, with participants representing the viewpoints (Lincoln & Guba, 1985). The researcher considered the drawbacks to this process: for example, children are exposed to careers advice and guidance at differing times in year 10 and 11. It is therefore expected that participants' views of post-16 education and training may change and that checking in with these participants may uncover differing views, leading to confusion as opposed to confirmation (Angen, 2000). Furthermore, Q methodology positions people's views as an expression of an activity, rather than an aspect of the mind; this is defined as *operant subjectivity*. This suggests that revisiting the participants' views in light of changing environmental factors could lead to differing views or expressions. With this in mind, the researcher decided not to complete the member checks.

5.4.1.b Transferability

5.4.1.b i Thick Description

By describing contextual information in detail, it may be possible to transfer these findings to similar contexts or demographics to those in the research (Lincoln & Guba, 1985). The three viewpoints are presented along with the demographic information of the participants and contextual information of the educational settings and LA, whilst also maintaining confidentiality. The participants attended a range of educational settings and, as such, the intricate details of the context are not fully understood by the researcher. The findings of this study can therefore be described as providing the reader with a *baseline understanding* (Gross, 1999). This means that comparing and contrasting these findings with those of other research in the field can contribute to the topic of interest.

5.4.1.c Dependability

5.4.1.c i Inquiry Audit

An external audit is recommended to foster the accuracy or validity of this research study. This typically involves a researcher not involved in the process examining both the process and the product of the research study (Lincoln & Guba, 1985). This can be difficult to achieve in relation to time commitments and can have its drawbacks in that the researcher may not be as familiar with the topic area and therefore may not share the same point of view (Creswell, 1998). One way to address this, as proposed by Shenton (2004), is to provide a detailed description of the research design and its implementation, detail the data gathering and analysis process, and complete a reflective appraisal of the research study. Accordingly, the researcher has provided details relating to the Q methodology procedure and, more specifically, a detailed description of the data gathering, analysis and interpretation of the findings for this study. In addition, the strengths and limitations of this study have been reported.

5.4.1.d Confirmability

5.4.1.d i Confirmability Audit, Audit Trail and Triangulation

A confirmability audit can be conducted at the same time as the dependability internal audit with the aim of exploring whether the findings and interpretations made are supported by the data, as opposed to representing researcher preferences (Guba & Lincoln, 1989). In order to show an awareness of any potential researcher bias, the researcher has reported her ontological and epistemological position, considering the influence of this on the decisions made regarding research design and data analysis procedures and acknowledging the role her constructs may have played in the interpretation of data. The researcher consulted a fellow researcher to overcome this. As previously described, triangulation and data analysis procedures have been carried out to ensure the interpretations are based on the findings in the data.

5.4.1.d ii Reflexivity

Being reflexive ensures that the researcher attends systematically to the context of knowledge construction, especially to the effect of the researcher (Lincoln & Guba, 1985). The researcher's preconceptions, background and position will affect what they choose to investigate, the methods they use and the way in which the findings are interpreted. It is therefore important that the researcher acknowledges and accounts for any preconceptions. For the purposes of transparency, the researcher has detailed her professional and personal motivations in chapter 1, completed the Q sort and recorded her reflections, beliefs and assumptions, as detailed in Appendix 4.

5.4.1.e Additional quality indicators in qualitative research

In addition to Lincoln and Guba's (1989) quality assessment indicators, it is also helpful to explore other criteria when conducting qualitative research. The researcher has therefore given consideration to the following additional criteria:

5.4.1.e i Meaningful

The research should address a meaningful issue and provide a strong rationale for its justification (Guba & Lincoln, 1989). The literature review in chapter 2 provided a detailed description of post-16 education and training opportunities. The importance of education post-16 has been debated in governmental and political party policies for a number of decades. In more recent times, the government introduced the Education and Skills Act 2008, requiring all children to stay in education or training until the age of 18. It is suggested that children make important decisions in year 10 and 11 (Wright, 2005), secondary-aged children's voices are unheard despite their rights (UNCRC, 1989; Widdowson, 2018), and their participation in decision-making is limited (Hart, 1992; Lawy & Diment, 2009). There are also doubts over whether post-16 pathways are appropriate (Bloomer & Hodkinson, 1997; Widdowson, 2018) and some children have been left in pointless cycles of unwanted training (Wolf, 2004). This may explain the marked rise in NEET young people at 18 (ONS, 2019). These findings therefore provided a rationale for the exploration of KS4 pupils' viewpoints regarding post-16 education and training.

5.4.1.e ii Ethical Treatment

The ethical treatment of participants was adhered to throughout this study. The participants and their parents were informed and gave consent. Furthermore, during the study the participants were reminded of their right to withdraw, were given the opportunity to ask questions and were debriefed on completion of the activity. The availability of rooms when conducting the research in educational settings proved to a little problematic. On occasion, participants were required to sit closer to one another than ideally one would have liked. This may have had an impact on the way participants responded to the activity. The following ethical guidelines were adhered to: British Psychological Society Code of Human Research Ethics (BPS, 2014); Health and Care Professions Council Guidance on Conduct and Ethics for Students (HCPC, 2016); HCPC Standards of Conduct, Performance and Ethics (2016); and University of Nottingham Code of Research Conduct and Research Ethics (University of Nottingham, 2016).

5.4.2 Quantitative quality indicators

5.4.2.a Reliability

Q methodology adopts an explanatory approach focused on mapping the plurality of perspectives as opposed to estimating the frequency and distribution of perspectives within a population (Zabala & Pascual, 2016). The findings from this study can therefore only be described as a snapshot of a participant's point of view at one moment in time, which could change depending on environmental factors. Having said that, the quantitative element of Q methodology utilises a range of mathematical equations which could suggest that the approach adopts some reliability measures and methodological rigour. Furthermore, Akhtar-Danesh et al. (2008) found high correlation coefficients for repeated Q sorts at different times with the same participants. It therefore could be said that the participants in this study could sort the statements in a similar way on a different occasion. This study also listed each stage of the process in detail, providing a rationale for decisions made; this is said to increase the fidelity and replicability of studies. Despite these measures, reliability cannot be assumed.

5.4.2.b Validity

To improve the validity of the findings the researcher consulted the criteria developed by Webler et al. (2009) and adopted the following approaches:

- improved the content and face validity of the Q-set; and
- reduced researcher bias and social responding.

5.4.2.b i Content and Face Validity

The researcher firstly consulted a range of EPs who had experience of undertaking doctoral research to verify that the concourse was representative of the topic area of interest, as recommended by Watts and Stenner (2012). The EPs were also given the opportunity to add anything they felt may be missing from the concourse. The researcher also consulted her supervisor who is very familiar with Q methodology. Following this, the researcher made only minor changes to the wording of certain statements during the refinement and piloting stage to ensure they were accessible to the P-set whilst remaining close to the original statement, as advised by Webler et al. (2009).

The post-sort questionnaire also offered an opportunity for participants to note any comments they would like to see added to the Q-set. These comments were minimal and on the whole participants responded 'no' to the question, with some noting that they felt the statements were clear and accurate. Three participants (two representing viewpoint 2 and one representing viewpoint 3) suggested additional statements. One participant representing viewpoint 2 suggested that parents influence the decisions children make at 16 and the other suggested that children are not given opportunities to explore post-16 options. The participant representing viewpoint 3 suggested that cultural values and background influenced the choices you make at 16. These suggestions are important additions that could be added to the Q-set if the study was to be repeated. However, it is important to note that the concourse claims only to be broadly representative rather than a fully comprehensive list of all matters related to this topic area (Watts & Stenner, 2012).

5.4.2.b ii Reduce Researcher Bias and Social Responding

By asking participants to independently complete the Q sort, Q methodology reduces the imposition of the researcher and the presence of social responding which can be encountered in other qualitative approaches, for example focus groups and interviews (Hughes, 2017). The research was conducted with up to five participants at a time. On a couple of occasions, the rooms available were smaller than hoped; as a result, participants had to sit in close proximity to one other, which could have influenced the way in which the participants responded to the Q sort. Steps were taken by the researcher to space out the participants as much as possible.

Researcher bias also can be present at the interpretation of factors stage of the data analysis. The researcher therefore recorded the process in a clear and transparent way. Furthermore, the researcher shared her interpretations with a fellow researcher who is very familiar with Q methodology, and he was in agreement with her.

5.4.2.c Generalisation

The aim of Q methodology is to capture the unique viewpoints of a certain grouping at a particular moment in time, rather than to search for findings that can be generalised at a population level (Watts & Stenner, 2012). This methodology can reveal a finite number of viewpoints which could be utilised for broader exploratory purposes. In this study, the views of KS4 pupils regarding post-16 education and training were explored. These findings could be helpful to consider when designing post-16 provision that appeals to all children, raising questions such as ‘Do the courses on offer suit the needs of all?’ A more detailed discussion relating to this will be provided in section 5.5.

Whilst it is accepted that the findings of a Q-methodological study cannot be generalised, they can serve to highlight viewpoints that exist in relation to the topic area and provide a rationale for further research to be undertaken, perhaps using different methodologies. It is therefore helpful to explain the demographics of the population representing these viewpoints to enhance the external validity of these findings. The P-set representation of males and females was even, at 50 per cent each. The P-set consisted of a variety of ethnicities with 41 per cent classified as White

British, 41 per cent Asian, 6 per cent Black Caribbean and 12 per cent other ethnicities. The P-set was predominantly made up of year 11 pupils, who represented 62.5 per cent, with the remaining 37.5 per cent being year 10 pupils. It is therefore important to note that the viewpoints may be more representative of year 11 than year 10 students and that they represent a predominantly White British and Asian population.

5.5 Implications for Professional Practice

The research findings of this study have important implications for many professionals working in secondary and post-16 education. This includes national and LA policymakers and politicians, leaders of post-16 education and training provisions, secondary school managers, teachers, career advisors, children, and EPs responsible for supporting the transition from secondary to post-16 education.

This study has revealed that a variety of viewpoints exist regarding post-16 education and training opportunities, revealing a gap within the existing literature, and shedding light on an issue that appears not to have been explored since the complete implementation of the Education and Skills Act 2008. Most significantly, the findings have revealed disparities between the assumptions made by policymakers and the viewpoints of KS4 pupils. In addition, the findings also revealed disparities amongst the pupils themselves along with the belief, by some, that their views not been considered in the design of post-16 provision . This has important implications for the design and delivery of post-16 provision, for the advice and guidance offered prior to post-16 and to the design of the KS4 curriculum. This research also has implications for many educational professionals, including EPs, as it brings to the fore differing viewpoints regarding post-16 education and training. If professionals are aware of these viewpoints, they can appreciate and address them, thereby enabling effective engagement with children regarding their needs, wishes and aspirations relating to post-16 education and training. It seems, therefore, necessary to consider the range of viewpoints that are held by KS4 pupils in order to ensure that the post-16 education and training offer is comprehensible to and valued by all.

For example, the participants whose Q sorts formed viewpoint 1 see participation in post-16 education and training as the preferred option for all (DfES 2007a), offering a

gateway to university and future employment (Bono and Galindo-Rueda 2006; Iannelli and Paterson, 2005). The views of the participants here appear to be in agreement with the assumptions made by policymakers: all children see post-16 education and training opportunities as beneficial and the preferred route at 16.

Participants represented by viewpoint 1 also believe opportunities available post-16 to be competitive and that employers prefer A-level qualifications and degrees (Blenkinsop, McCrone, Wade & Morris, 2006). This may mean that some children experience added pressure to secure certain post-16 opportunities. Again, further exploration by professionals in the LA is required to ascertain whether this view is represented more widely by other pupils and, if so, to evaluate the impact this may have on the transition process. Viewpoint 1 also suggested that peers influence the decisions children make about post-16. This is something that professionals should be mindful of when supporting children to make decisions.

Participants represented by viewpoint 2 believe that children see the benefits of post-16 education and training opportunities. However, they feel there is a lack of suitable pathways and guidance; therefore, children struggle to understand these benefits and to make decisions (McLarty & Moran, 2009; Mannion, 2002). The differences noted in this viewpoint have implications for policymakers at a governmental and LA level. It may be helpful for professionals within the LA to engage in a dialogue with children in KS4 transitioning to post-16 in order to understand any problems they face when making choices about post-16 opportunities. This may also include setting up pupil discussion forums to help children to formulate a better understanding of post-16 provision and appreciate some of the advantages and disadvantages of the different options and routes. Furthermore, for those pupils who struggle with the transition, the LA could set up targeted groups to offer additional, more focused support. At a governmental level, it may be helpful to explore any biases in the current model of delivery, public discourse or media and redress any perceptions about post-16 education. The participants who formed viewpoint 2 were predominantly female; this may tentatively suggest there are gender differences in perceptions and experiences of post-16 opportunities and the transition process. Again, caution needs to be applied here, but further exploration may be warranted to clarify whether differential support might be beneficial.

The participants whose Q sorts formed viewpoint 2 also question the suitability of what is on offer post-16, expressing the view that the courses available do not equip people with the right skills. This was raised as a concern by Wolf (2011) prior to the raise in the age of participation to 18 in 2015. The participants also cautiously agree that they had not been consulted regarding the legislation changes, leaving children feeling disenchanted with the process, perhaps as they do not see their viewpoint represented in the policy. This may have implications for policymakers, members of parliament and LAs, requiring them to offer a nationwide consultation to all pupils, where policymakers share their ideas regarding the policy and actively listen to the views of children, perhaps incorporating these views in to future policies (Hart, 1992; Shier, 2001).

The participants represented by viewpoint 3 believe that participation in post-16 education and training should be optional. Children holding this view could be left feeling disempowered and frustrated by having their right to choose removed. This has far-reaching implications for professionals offering support to pupils, for policymakers and leaders in post-16 provision designing the courses, and for senior leaders in secondary schools promoting post-16 education. These children may have other options in mind and may have given little thought to the post-16 offer. They may, therefore, require personalised and additional support to understand the benefits of post-16 opportunities, enabling them to weigh up the different options available and make an informed choice in line with their needs and interests. The participants representing this viewpoint also believe apprenticeships, internships and volunteering to be most beneficial in equipping people with the skills required to secure future employment (Haywood et al., 2009; Blenkinsop, McCrone, Wade & Morris, 2006; Wolf, 2011). However, these participants also acknowledge the benefits of academic courses. This suggests that some children believe opportunities that include on-the-job experience to be important. It would be helpful for policymakers and senior leaders involved in the design of post-16 provision to be aware of this and to consider ways to incorporate work experience opportunities in the design of courses.

The participants representing viewpoint 3 also suggest that children select courses with no clear pathway in mind (Children's Commissioner, 2007), despite being given careers advice that they consider adequate. This implies that children perhaps feel

overwhelmed by what is on offer and by being given the freedom to make their own choices whilst having the right to leave at 16 removed. This viewpoint should be given consideration by professionals supporting children, as being compelled to 'stay on' may place children at a disadvantage when making important decisions; some children may therefore require more information, guidance and support when making these decisions.

In addition to the implications already noted, the views represented in viewpoint 1 are of particular interest from a cultural perspective. The participants representing this viewpoint were predominantly Asian males. One could tentatively posit that certain cultural groups are more attuned to the post-16 opportunities which they are now required to access. This also, rather concerningly, could suggest that certain cultural groups may be less attuned to post-16 opportunities and may be disadvantaged by recent changes in legislation requiring all children to remain in education or training until the age of 18. This should be taken with caution but may have implications for professionals in the LA and policymakers, who may wish to consider whether certain groups require additional support.

All of the viewpoints acknowledge that for some children who have had negative schooling experiences (Payne, 2003), post-16 education and training may not be the preferred option. This suggests that it is worthwhile to directly consult children who have disengaged from education and capture their views and experiences to develop an understanding of their needs, wishes and aspirations. This will enable professionals to change the trajectory of these children and promote positive outcomes. In addition, all of the viewpoints state that a child's likes and interests play a vital role in the choices they make about post-16 education and training (Blakemore, 2018). A helpful first step, therefore, may be for professionals in the LA to consider what children are interested in and map this locally with what is on offer.

The findings in this research could certainly be of interest to and informative for professionals supporting children transitioning from secondary school to post-16 education. In light of these findings, the researcher will consider the implications for the following: KS4 pupils, senior managers responsible for KS4 and post-16

education, policymakers at the LA and national/governmental level, and EPs. First and foremost, the implications for KS4 pupils could include:

- opportunities to engage in discussions with senior leaders responsible for the KS4 curriculum to share their views regarding the suitability of guidance, support and opportunities to plan for post-16 and employment (PfA, 2019); and

- being part of a working group reviewing the strengths and limitations of the current post-16 offer, actively informing the decision-making process, as suggested by Hart (1992) and Shier (2001).

In light of these suggestions, the implications for policymakers at the national and local level could be:

- To be aware that within the population of KS4 pupils there are a range of viewpoints and experiences preceding post-16, and to therefore promote post-16 opportunities in a way that resonates with children holding different viewpoints. This may include all or some of the following: developing pupil discussion forums; having access to guest speakers from post-16 providers to outline the pathways on offer in the local area; consulting with a variety of children (from different cultural groups and of different genders) who have experience of accessing different pathways; and allowing children to try and review different pathways and change pathways later on, if required.

- To be mindful that for some children raising the age of participation in education or training to 18 is problematic, and therefore exercise caution when promoting the benefits without a clear understanding of the challenges this change has presented.

The implications for secondary school senior leaders and heads of post-16 providers could be:

- To be aware of the differing viewpoints that exist in their locality and consider whether career advisors, open days, prospectuses and the post-16 offer

recognise and address these viewpoints. This may include holding a consultation with KS4 and post-16 pupils to explore their views of the current process, speaking to career advisors to understand how they support children who hold differing viewpoints, and giving consideration to the support offered to children who may feel uninformed or disempowered. This will enable more effective engagement with children regarding their aspirations, career pathways and post-16 opportunities, possibly creating a personalised plan for those who lack a clear insight.

- To involve KS4 and post-16 pupils in the working group developed in the host authority to capture their divergent views; to create a policy to ensure their views are captured in a variety of ways; and to utilise Hart's (1992) Ladder of Participation model and/or Shier's (2001) Pathways to Participation model to critically evaluate how the LA, secondary schools and post-16 providers consider their views in decisions made regarding post-16 opportunities.

Lastly and importantly, given that the EP role in post-16 is under development (Morris & Atkinson, 2018), the implications for EPs could be:

- To work with a child, individually advocating on their behalf by placing the child at the centre of planning, promoting greater choices and control over decision-making, in line with the EP's ethical and moral codes of conduct and best practice guidance (BPS, 2009; DfE and DoH, 2014). This may be particularly important for children who have SEND or experience difficulties in schooling, an area in which EPs have a range of expertise. In this role, the EP may explore a child's post-16 options and aspirations, utilising person-centred and solution-focused approaches (Tyson, 2011), and draw attention to the needs of children in new settings, specifying appropriate support (Craig, 2009) to encourage the meaningful inclusion of their views.

- To work systemically with post-16 providers to develop alternative pathways (Crichton & Hellier, 2009; Haughey, 2009) for children who have a dislike of school or have disengaged from education (Currie & Goodall, 2009; Gabriel,

2015). To liaise with policymakers and senior leaders in primary, secondary and post-16 education, and LA managers to actively take steps to ensure children remain engaged in education throughout their schooling life. This may include: the development of career pathways for all children transitioning from secondary to post-16 education, the development of protocols and procedures designed to promote the active engagement of all children in the decision-making process and development of education provision, and the dissemination of good practice guidance for education providers (Craig, 2009; Mallinson, 2009).

Ultimately, the differences in viewpoints among KS4 pupils regarding post-16 education and between policymakers and pupils suggest that it is vitally important that children be consulted about their needs, prior to their engagement in post-16 education, to ensure that it is accessible and desirable for all. This will demonstrate a proactive, as opposed to a reactive, response to reduce disengagement post-16. Hart's Ladder of Participation model (1992) and Shier's Pathways to Participation model (2001) may offer a useful way for organisations, professionals and policymakers, in the first instance, to evaluate how they involve children in the decision-making process and consider what the next step in promoting this might be. EPs are well equipped to do this, with their strong desire to advocate for children, their knowledge of child development and organisational systems, and their unique position as an external professional working in collaboration with a number of educational professionals at varying levels within the system.

5.6 Implications for Future Research

It is hoped that these research findings will make educational professionals, LAs and policymakers aware of the viewpoints held by children with regard to post-16 education and training opportunities, and that this will enable professionals and children to engage in effective dialogue to consider children's post-16 needs and aspirations. This is something that, according to the literature, has not been explored since the implementation of the Education and Skills Act 2008. The sharing of these findings appears to be a helpful next step in developing professionals' understanding of the needs of KS4 pupils. With this knowledge it is hoped that channels of communication

can be opened between all parties, including children, to develop an understanding of how policies and practices in post-16 affect children differently (Davies, 2007). Sharing these findings may also develop children's self-worth, feelings of empowerment and sense of social justice, whilst also challenging the power dynamics that exist between children and adults making important decisions (Davis, 2007). The researcher aims to disseminate these findings to the LA and senior leaders responsible for the KS4 curriculum and post-16 provision.

In light of these findings, future research may consider examining the prospectuses of colleges and post-16 providers to discover whether they address the range of viewpoints identified in this study. One way to do this would be to identify the characteristics and features of the prospectuses and make inferences about the writers and the messages within the text, using content analysis. Such a study would examine the comprehensiveness of coverage and identify the writers' intentions, biases, prejudices and any oversights (Krippendorf, 2013), prompting post-16 providers to consider whether the messages portrayed and opportunities available appeal to the needs of all KS4 pupils.

In addition to this, future research may include conducting interviews with career advisors, KS4 leaders, and post-16 leaders to assess their understanding of the viewpoints currently held, so that they can respond to these when offering information, support and guidance to children transitioning to post-16 education and training. This would ensure that the views of children inform the decision-making process relating to post-16 provision.

It may also be helpful to explore in more depth other findings from this research. This may include investigating cultural and gender differences regarding perceptions of post-16 opportunities, or exploring variant views in primary school children and young people following completion of post-16, to examine if these were in existence before secondary and if they remain into adulthood. In addition, an exploration of the views of children disengaged from education in KS4 or post-16 education may uncover useful insights.

Following on from this, future research could also seek to generalise these findings to a wider population of KS4 pupils. For example, the viewpoints identified using Q methodology could be used to inform a quantitative study, such as a survey. A representative sample of participants could be selected and asked to what extent they agree and disagree with the viewpoints. These findings could inform policies and best practice guidance documents at a national and local level, prompting professionals and organisations to consider how they incorporate children's views in the planning and design of post-16 provision.

5.7 Conclusions

This research aimed to explore and identify the viewpoints of KS4 pupils regarding post-16 education and training opportunities. The findings revealed three distinct viewpoints from 32 KS4 pupils completing a 41-item Q sort. These findings have uncovered a rich and textured view of post-16 education and training opportunities. The findings have also drawn attention to differences not only among pupils themselves but between pupils and policymakers who had made assumptions about their beliefs regarding post-16 education and training opportunities.

This research makes a significant contribution to the existing literature relating to education and training post-16. It appears to be the first study of its kind to explore the views of KS4 pupils following the implementation of the Education and Skills Act 2008 requiring all children to participate in education or training until the age of 18. The research also illuminates varying viewpoints on remaining in education, on post-16 provision and on support services and processes. These viewpoints challenge some of the apparent assumptions made by policymakers, for example that engaging in education or training post-16 is beneficial for all, and confirm suggestions in the literature that not all KS4 pupils share this homogenous view. In doing so, this research has highlighted some of the potential challenges children may face when transitioning to post-16 education and training. These findings have implications for all concerned with the design and implementation of post-16 education and training and provide a rationale locally for the need to open up channels of communication between children and professionals to discuss the suitability of the current post-16 education provision.

Q methodology has afforded participants the opportunity to share their views, allowing the researcher to reveal the diversity that exists within views on this subject. This has led to the development of a rich picture, highlighting nuances within the complex, socially contested topic area.

An advantage of Q methodology is that it allows the researcher to hear the voices of the many rather than the few, revealing any divergent viewpoints – something that other qualitative approaches cannot offer. The methodology therefore met the research aims of capturing majority *and minority* views. Taking into consideration the limitations of Q methodology, the researcher adhered to a systematic and transparent process to increase the validity and replicability of these findings.

This research has a number of implications at varying levels – national and local – for organisations and professionals supporting KS4 pupils who are transitioning to post-16 education and training. Importantly, it has implications for the host LA where it is recognised that post-16 provision is not always sufficient in meeting the needs of all children, and for the government who are seeking to understand how they can meet the needs of all children post-16.

Several important implications have been noted for professionals, organisations and for the children themselves. These include: effective communication between children and secondary and post-16 leaders, a review of current policies and practices relating to capturing the views of children regarding post-16 provision, and the active participation of children in the decision-making process. The implications also apply to EPs, who are perfectly positioned to work collaboratively with a range of professionals to ensure that children, especially those who are disengaged from education, are at the heart of the decision-making process.

Future research should endeavour to share these viewpoints, to enhance their external validity and generalisability, and to inform the critical evaluation of materials, organised events and dialogue between children and professionals relating to post-16 provision.

The research offers an interesting insight into the differing ways KS4 pupils view post-16 education and training opportunities. This could be a useful starting point for future researchers, professionals and organisations to examine how they engage in effective communication with children and to deepen their understanding of pupil views. These views may then serve to inform the design of policies that shape practice, promoting the participation of children in the design and implementation of post-16 provision, making it suitable for the many not the few.

6. References

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7. Appendices

1. Systematic Literature Review Search Strategies and Returns
2. Excluded Studies from the Systematic Literature Review
3. Development of Themes from the Systematic Literature Review
4. Researcher's Reflections
5. Interview and Focus Group Questions to Support Concourse Development
6. Concourse of Original Statements
7. Pilot Q-set of 55 Statements
8. Final Q-set
9. Ethical Approval
10. Participant Information Sheet
11. GDPR Privacy Information Sheet
12. Participant Consent Form
13. Parent/Carer Information Sheet
14. Parent/Carer Consent Form
15. Q-sort Instruction Sheet
16. Blank Distribution Grid
17. Post-sort Questionnaire
18. Debrief Form
19. Crib Sheets
20. Factor Arrays
21. Distinguishing Statements

1. Systematic Literature Review Search Strategies and Returns

Database	Date	Search terms	Search results
PSYCinfo/Ovid	20/07/19	(secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form”)	61 (abstracts only)
	21/07/19	((secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form” and Q methodology))	1
ERIC	20/07/19	(secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form”)	410 (remove duplicates 349)
	21/07/19	((secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and	0

		(“post-16 education and training” or “further education college” or “sixth form” and Q methodology))	
Web of Science	20/07/19	(secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form”)	79
	21/07/19	((secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form” and Q methodology))	21
Google Scholar		(secondary or high school children or young people or student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form”)	37
		((secondary or high school children or young people or	5

	student* or pupil*) and (views or opinions or beliefs or perceptions or attitudes) and (“post-16 education and training” or “further education college” or “sixth form” and Q methodology)	

2. Excluded Studies from the Systematic Literature Review

Study	Reason for exclusion
Anderson and Peart (2016)	Not secondary-aged students.
Hodgson and Spours (2000)	Not capturing the views of young people regarding post-16 education or training (work experience).
Finnie, Finlay and Ridler (1999)	Pre-2000, unable to view the study.
Crawford, Meschi, and Vignoles (2011)	Not secondary-aged students.
Wilkinson (1972)	Pre-2000.
Messer (2018)	Not capturing the views of post-16 education or training (work experience).
Nash (1996)	Pre-2000, not peer-reviewed (article).
Onion (2004)	Not capturing views of post-16 (mathematics in post-16).
Grey and Morgan (1998)	Not secondary-aged students.
Hill (2000)	Not peer-reviewed (article), not capturing views of post-16 education and training.
Timperley and Gregory (1971)	Pre-2000, unable to access study.
Nash (1996)	Not peer-reviewed, article.
McCrone, Wade and Golden (2007)	Not capturing the views of post-16 education or training (strategies used in FE colleges for early college transfer).

3. Development of Themes from the Systematic Literature Review

Study	Extract relating to the research question	Codes	Descriptive themes
1. Worth (2002)	The more education you gain the more jobs you can get.	Education has a high value in terms of employability (i).	Individual aspirations, skills and interests
	if they had invested a lot in gaining qualifications they would not want temporary work.	Investment in education should lead to permanent employment (ii).	Societal value of education and training
	Less sure about whether more education did actually lead to job security	Higher qualifications may not always lead to employment(iii).	Familial perspectives and systemic factors
	Females were also more likely to believe that higher levels of education would not necessarily facilitate being able to find and secure job	Higher qualifications may not always lead to employment (iii).	
	females were more concerned about receiving secure returns for educational investment	Investment in education should lead to permanent employment (ii).	
	the higher their expected attainment the more importance respondents attached to the role of education and training to employability	Education has a high value in terms of employability (i).	

	respondents being positive towards the idea of lifelong learning, participating in education or training was generally seen as a high investment to make that should be rewarded with permanent or secure work.	Investment in education should lead to permanent employment (ii).	
2. Davies and Biesta (2007)	students' vocational aspirations were largely unformed, shifting and variable during the two years of their course.	Career aspirations and interests may change (iv).	
	A week's work experience, which was part of their school rather than college curriculum, proved a significant factor for all the research participants, either to confirm their vocational aims or to raise doubts	Work experience supports decision-making post-16 (v).	
	a major reason for both cohorts' choice, of course, was the desire to study differently and a different environment from school, for example, the opportunity to undertake 'real work'.	Further education offers an opportunity to undertake real work (vi).	

	YP with a clear career pathway found the vocational course had a positive influence on vocational aspirations.	Vocational courses can support the process of seeking employment in their chosen career (vii).	
3. Swift (2009)	the vast majority of students desired to go to college to do A-Levels, rather than to Further Education (FE) or get a job, or in the case of the UK, an apprenticeship	Academic qualifications are seen as superior (viii).	
	Students wished to pursue academic subjects at college rather than vocational subjects.	Academic subjects are superior to vocational (ix).	
	School timetabling, it sometimes was not possible for students to take the combination of subjects that they desired. Students may be unable to select the combinations they want, and it may also limit future employment options.	Choices of courses are not always available, hindering pathways to chosen career (x).	
	Some students have career aspirations that they have held from childhood influencing their choice of study.	Aspirations play a vital role in decision-making post-16 (xi).	

	Students can be quite single-minded in pursuing their goals.	Aspirations may hinder opportunities and limit options in employment (xii).	
	Approaches to subject choice were more haphazard.	A lack of clear aspirations may hinder employment opportunities (xiii).	
	Students also had ‘back up’ plans, but in many cases, this was because their first choice of career was potentially unrealistic	A variety of options opened opportunities for employment (xiv).	
	A few, still at school and mainly in the UK, were not yet sure about what they wanted to do.	A lack of clear aspirations makes decision-making difficult (xv).	
	obtaining academic qualifications was an essential factor in helping them to gain well-paid employment, and therefore it was necessary to work hard and achieve high grades in school.	Education has a high value in terms of employability (i).	
	University degrees were seen to be of prime value and the general belief was that the more	Education has a high value in terms of employability (i).	

	academic students will go to university and then get the 'best' jobs.		
	young people in this study indicated that their career choices and decisions were influenced in one way or another by their parents.	Parents and friends influence decision-making post-16 (xvi).	
	Young people were asked what they wanted to do, and then the information was provided on the course or career that they had already identified, often in the form of a leaflet. Thus there was no attempt to encourage the young people to take a broader perspective, to consider related careers	Careers advice may not be sufficient to support decision-making post-16(xvii).	
	majority of young people see their schooling as preparing them for the world of work. They expect that school will provide them with the knowledge, skill and attitudes required to get a job.	Education prepares you for employment (xviii).	
4. Blenkinsop, McCrone, Wade and Morris (2006)	YP were influenced by their perception of a subject (employment and worth).	Employment opportunities influenced decision-making (xix).	

	young people's choices to fluctuate over time, even amongst those who had at first seemed very certain about their future goals.	Career aspirations and interests may change (iv).	
	Some YP were influenced by factors associated with agency, for example friends, family and other external sources of influence. Friends are highly influential.	Parents and friends influence decision-making post-16 (xvi).	
	Most students considered the impact of their choices on their futures, for example, career opportunities.	Making decisions about post-16 impacts on future employment and career prospects (xx).	
	Students struggled to make decisions where advice and guidance were not given.	Careers support and guidance has a positive impact on decision-making (xxi).	
	Many students wanted guidance on what subjects they were good at, or what vocational courses at college they might be best suited to.	Careers advice and support is a vital part of the decision-making process (xxii).	

	When students felt supported in decision-making by the school they were more influenced by school factors (such as individual talks with teachers and the careers education and guidance provision).	Careers support and guidance has a positive impact on decision-making (xxi).	
	Young people valued having sufficient time to make choices, the opportunity to have individual conversations with teachers to discuss their options, and detailed, clear and impartial information on courses and pathways so that they could make informed choices.	Careers advice and support is a vital part of the decision-making process (xxii).	
5. Mannion (2002)	17 per cent school life /aspects of learning. Codes of conduct, ethos and atmosphere, curriculum and school timetable impact on decisions.	College and post-16 education offer, ethos and timetable impact on decision-making regarding post-16 (xxiii).	
	15 per cent relations (family, neighbours and close partners).	Parents and friends influence decision-making post-16 (xvi).	
	22 per cent of exams results influenced decisions about post-16 education and training.	Qualifications obtained influence choice post-16 (xxiv).	

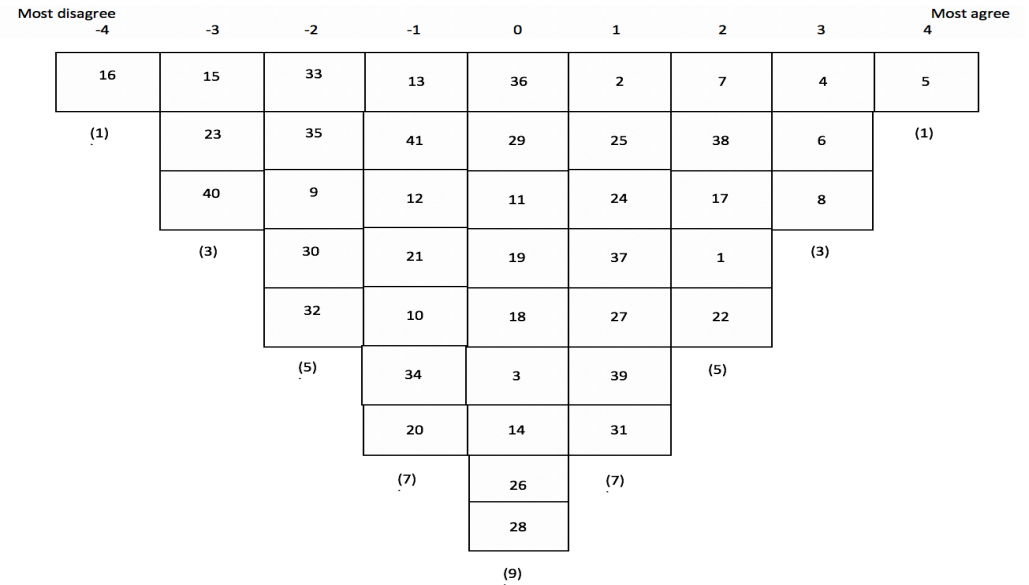
	27 per cent career, job, work, money influenced decision making.	Employment opportunities influenced decision-making (xxv).	
	May not be suitable for everyone, nor should they necessarily want to stay at school on reaching 16.	Post-16 education and training opportunities may not suit everyone (xxvi). Total: 24 codes	

4. Researcher's Reflections

The researcher's views of post-16 education and training opportunities are as follows:

- Children are entitled to express their views and be heard regarding their participation in education and training post-16, in line with the UNCRC (1989).
- Post-16 provision should be an attractive option, offering opportunities for children to learn vital life skills. It also needs to be flexible to suit the needs of all children.
- Promoting inclusion in education is a professional obligation in the EP role and also a passion of the researcher.
- Careers advice and guidance should support all children to make informed choices about preferred pathways to their chosen careers. These pathways should be clear and offer direct routes into employment.
- Children should be encouraged to consider career options from a young age in line with the guidance in the preparation for adulthood document.

The researcher also completed the Q sort and showed a preference for children retaining the right to choose whether they remain in education or training post-16 (Q sort statements 5 and 4). The researcher suggested that post-16 education and training should be suitable for all, but that the guidance and support and current post-16 provision was not adequate. This potentially leaves children feeling confused about the suitability of post-16 education and training.



5. Interview and Focus Group Questions to Support Concourse Development

Questions – anything you could say about post-16 educational and training opportunities.

1. Tell me about the post-16 opportunities and process. What are your thoughts about them? What would students and parents think of these?
2. What are your views of the opportunities available in post-16?
3. What opportunities would you like to see available post-16 and why?
4. What negatives might there be to each of these opportunities?
5. What are the barriers to opportunities post-16?
6. What are the helping factors to opportunities post-16?
7. What do you think of the educational opportunities that are available?
8. What do you think of the non-educational opportunities?
9. What do you think about careers advice services?

6. Concourse of Original Statements

Any statements relating to post-16 opportunities (statements taken from literature, websites, blogs, focus group, interviews, conversations between researcher and EPs).

	Statement	Source
1.	Staying on in sixth form will mean you have a better chance of going to university.	Researcher's views
2.	Lack of joined up approach at the point of transition to post-16 leads to an increased chance of becoming unemployed or not in education or further training.	Interviewee one – Social care manager from the transitions team
3.	Professionals supporting young people to make decisions about post-16 education and training do not work together to promote education and employment post-16.	Interviewee one – Social care manager from the transitions team
4.	Education and training courses in post-16 are not suitable for some young people.	Interviewee one – Social care manager from the transitions team
5.	Alternative provision opportunities are limited.	Interviewee one – Social care manager from the transitions team
6.	Post-16 opportunities do not appeal to everyone.	Interviewee one – Social care manager from the transitions team

7.	There is a lack of creativity in education leading to limited range of courses and training.	Interviewee one – Social care manager from the transitions team
8.	Post-16 opportunities are not appropriate for all.	Interviewee one – Social care manager from the transitions team
9.	Colleges are selective, discriminating against certain groups.	Interviewee one – Social care manager from the transitions team
10.	Lack of early careers guidance for young people has a negative impact on decision-making about post-16 education and training.	Interviewee one – Social care manager from the transitions team
11.	On the job training leads to employment.	Interviewee one – Social care manager from the transitions team
12.	Volunteering does not always lead to employment.	Interviewee one – Social care manager from the transitions team
13.	Volunteering upskills young people in preparation for employment.	Interviewee one – Social care manager from the transitions team
14.	Work-based opportunities are limited.	Interviewee one – Social care manager from the transitions team
15.	A good education leads to successful employment pathway.	Interviewee one – Social care manager from the transitions team
16.	A lack of funding for suitable courses restrict post-16 opportunities.	Interviewee one – Social care manager from the transitions team

17.	The aspirations of young people are not always supported or promoted.	Interviewee one – Social care manager from the transitions team
18.	College places are limited and competitive.	Interviewee one – Social care manager from the transitions team
19.	A lack of funding prevents young people from accessing courses of choice.	Interviewee one – Social care manager from the transitions team
20.	Career options and pathways are not promoted in schools.	Interviewee one – Social care manager from the transitions team
21.	Colleges do not always meet the needs of young people limiting post-16 options for young people.	Interviewee one – Social care manager from the transitions team
22.	Colleges and employers often do not work with each other well, preventing training opportunities.	Interviewee one – Social care manager from the transitions team
23.	Career advisors help young people to find suitable post-16 courses or employment.	Interviewee one – Social care manager from the transitions team
24.	Support for young people transitioning to post-16 is inadequate.	Interviewee one – Social care manager from the transitions team
25.	Further education and job training upskill the workforce.	Interviewee one – Social care manager from the transitions team
26.	The post-16 offer is not inclusive.	Interviewee one – Social care manager from the transitions team
27.	Choice of colleges is good.	Interviewee two – post-16 SEND manager

28.	Flexibility in post-16 options means you can change courses to suit.	Interviewee two – post-16 SEND manager
29.	There is a limited number of supported internships.	Interviewee two – post-16 SEND manager
30.	More workplace-based opportunities are required.	Interviewee two – post-16 SEND manager
31.	Post-16 offer is structured for young people to progress through to higher qualifications.	Interviewee two – post-16 SEND manager
32.	Post-16 support is all right up to 19.	Interviewee two – post-16 SEND manager
33.	Funding cuts have changed the post-16 support landscape.	Interviewee two – post-16 SEND manager
34.	There are limited options for young people who do not fit the academic route.	Interviewee two – post-16 SEND manager
35.	Technical engineering/T levels may offer an alternative pathway, promoting vocational courses.	Interviewee two – post-16 SEND manager
36.	On the job training is important.	Interviewee two – post-16 SEND manager
37.	On the job work opportunities are difficult to coordinate.	Interviewee two – post-16 SEND manager
38.	Lack of coordination in services restricts the post-16 offer.	Interviewee two – post-16 SEND manager
39.	Schools should provide careers advice.	Interviewee two – post-16 SEND manager
40.	Attending Sixth form colleges leads to higher qualifications.	Interviewee two – post-16 SEND manager
41.	Sometimes young people's aspirations are gender specific.	Interviewee two – post-16 SEND manager
42.	Mismatch between young people aspirations and parental aspirations.	Interviewee two – post-16 SEND manager
43.	Careers guidance in schools can be mixed.	Interviewee two – post-16 SEND manager

44.	Parental aspirations placing pressure on the school ensures young people receive adequate careers advice.	Interviewee two – post-16 SEND manager
45.	Ofsted track young people in post-16 to assess whether post-16 pathways have been successful.	Interviewee two – post-16 SEND manager
46.	A lack of aspiration prevents young people from accessing suitable courses.	Interviewee two – post-16 SEND manager
47.	There's a lack appropriate and suitable pathways for young people.	Interviewee two – post-16 SEND manager
48.	Young people are matched to unsuitable post-16 courses.	Interviewee two – post-16 SEND manager
49.	Young people who have experienced difficulties in education/disrupted education can struggle to access mainstream colleges.	Interviewee two – post-16 SEND manager
50.	On the job work opportunities are difficult to coordinate.	Interviewee two – post-16 SEND manager
51.	Lack of coordination in services restricts the post-16 offer.	Interviewee two – post-16 SEND manager
52.	DUPLICATE of 39	
53.	DUPLICATE of 43	
54.	Pre-engagement courses support young people who have experienced difficulties in education to access post-16 opportunities and training.	Interviewee two – post-16 SEND manager
55.	There are a pots of funding streams/bursaries for young people who experience difficulties.	Interviewee two – post-16 SEND manager
56.	Access to appropriate careers advice opens up doors to funding and alternative post-16 opportunities.	Interviewee two – post-16 SEND manager

57.	Loss of youth services, funding arrangements and career advisors has had a negative impact on young people accessing post-16.	Interviewee two – post-16 SEND manager
58.	Preparation for adulthood needs to start at a younger age.	Interviewee two – post-16 SEND manager
59.	Mismatch between parental expectations and post-16 offer.	Interviewee two – post-16 SEND manager
60.	Access to a range of professionals offering advice in schools can promote young people's aspirations and goals.	Interviewee two – post-16 SEND manager
61.	Access to good links including colleges and universities is helpful.	Interviewee two – post-16 SEND manager
62.	Sixth form provides a gateway to university.	Interviewee two – post-16 SEND manager
63.	Sometimes Sixth form promotes a young person's opportunities in employment.	Interviewee two – post-16 SEND manager
64.	There are limited jobs in the workforce.	Interviewee two – post-16 SEND manager
65.	A lack of careers support and guidance leads to vast selection of courses that may not promote a clear career pathway.	Interviewee two – post-16 SEND manager
66.	Informed parents and young people make better choices that promote the career pathways.	Interviewee two – post-16 SEND manager
67.	The way colleges are promoted impacts on the choices young people make regarding post-16.	Interviewee two – post-16 SEND manager
68.	Young people make choices about post-16 based on the views and decisions of their peers and family.	Interviewee two – post-16 SEND manager
69.	Staying on in education will lead to better outcomes for all young people.	Literature review – Department for Education (2018). *What works to improve the educational*

		outcomes of Children in Need of help and protection. London. Crown Copyright.
70.	Participating in education post-16 will lead to higher levels of skills and qualifications.	Literature review – Education and Skills Act 2008
71.	On the job training in the workplace supports skills development and career progression.	Literature review – Department for Work and Pensions (2007) *Opportunity, Employment and Progression: making skills work.* London. Crown Copyright.
72.	Higher qualifications will increase your chances of securing employment.	Literature review – Department for Work and Pensions (2007)
73.	Improving the quality of education will make it more attractive to young people.	Literature review – Department for Children, Schools and Families. (2008). *Raising Expectations: Enabling the System to Deliver Update and next steps*. London. Crown Copyright.
74.	Young people must be in the driving seat to inform decisions, shape provision, and inspect quality of education.	Literature review – Department for Education (2015). *Positive for Youth.* London. Crown Copyright.
75.	Raising young people's aspirations and driving up participation and attainment in learning is the best way to help young people realise their potential and get ready for work.	Literature review – Learning and Life Skills Council (2009) *Identifying Effective Practice in Raising Young People's Aspirations: Final Report.* Coventry. Learning and Life Skills Council.

76.	Staying on in education post-16 helps to prepare you for adult life and employment.	Literature review – Learning and Life Skills Council (2009)
77.	Staying on in education gives young people the skills and knowledge to reach their full potential in their careers.	Literature review – Learning and Life Skills Council (2009)
78.	Further participation in education or training is in terms of increased earning power.	Literature review – Children's Commissioner. (2007). *Raising Expectations: Staying in Education and Training Post-16 A response by 11 MILLION led by the Children's Commissioner*. Retrieved from: http://dera.ioe.ac.uk/6650/1/11 MILLION Raising Expectations Response.pdf
79.	Participating in post-16 education or training will lead to on the job training.	Literature review – Children's Commissioner (2007)
80.	Young people who participate in post-16 education or training are also more likely to be in employment at a later date.	Literature review – Children's Commissioner (2007)
81.	Young people need to be offered a range of suitable post-16 pathways; to ensure the availability of high-quality guidance and support; and to offer good, alternative pre-16 provision.	Literature review – Children's Commissioner (2007)
82.	Staying on in education will lead to improved qualifications.	Literature review – Children's Commissioner (2007)

83.	All young people want to stay in post-16 education or training.	Literature review – Children's Commissioner (2007)
84.	Young people will not take advantage of new opportunities unless they are fully aware of them, and able to choose the most appropriate pathway.	Literature review – Children's Commissioner (2007)
85.	Young people are less likely to remain in (voluntary) education and training post-16 if their pre-16 experience of education has not been positive.	Literature review – Children's Commissioner (2007)
86.	An unsuitable curriculum or teaching style may lead to disaffection and the desire to leave education at the earliest possible opportunity.	Literature review – Children's Commissioner (2007)
87.	It is important to offer good, alternative pre-16 provision which will engage young people and encourage them to want to continue learning after reaching the school leaving age.	Literature review – Children's Commissioner (2007)
88.	It is preferable to remain in education and training as long as possible, and that the decision to leave at the end of compulsory education is an inferior decision.	Literature review – Nuffield Foundation (2005). *The Nuffield review of 14-19 education and training annual report 2004□5.* Oxford: Department of Educational Studies, University of Oxford.
89.	Leaving full-time education at 16 may be a meaningful and economically rational decision.	Literature review – Nuffield Foundation (2005)
90.	Young people tend to choose an institution matched to their self-image.	Literature review – Nuffield Foundation (2005)

91.	Locality can influence both opportunity structures and individual's aspirations.	Literature review – Nuffield Foundation (2005)
92.	Local labour market opportunities influence destinations at 16.	Literature review – Nuffield Foundation (2005)
93.	Young people with the highest levels of educational attainment are most likely to remain in full-time education after 16.	Literature review – Nuffield Foundation (2005)
94.	Work-based learning will improve future employment chances.	Literature review – Nuffield Foundation (2005)
95.	Young people would like more information about the range of options available post-16.	Literature review – Nuffield Foundation (2005)
96.	Visiting independent professional careers advisers is the most useful source of careers advice and guidance.	Literature review – Nuffield Foundation (2005)
97.	Young people do not receive adequate guidance on how to achieve what they aspire to in future in terms of education or employment.	Literature review – Nuffield Foundation (2005)
98.	Guidance in schools falls short in that it does do enough to help pupils with their generic interests.	Literature review – Nuffield Foundation (2005)
99.	Parents influence decisions regarding post-16 education and training.	Literature review – Nuffield Foundation (2005)
100.	Young people choose a particular post-16 route merely because their friends have chosen it.	Literature review – Nuffield Foundation (2005)
101.	Negative attitudes towards and bad experiences at school influence post-16 choices.	Literature review – Nuffield Foundation (2005)

102.	Young people stay on in education post-16 as they are unsure of what to do and are fearful of making the wrong decision.	Literature review – Nuffield Foundation (2005)
103.	Education and employment outcomes for our young people are not yet good enough.	Literature review – Bradford Council. (2015). A joint approach to post-16 education improvement in Bradford and the need for change. Retrieved from: https://www.bradford.gov.uk/media/3075/a-joint-approach-to-post-16-education-improvement-in-bradford-and-the-need-for-change.pdf
104.	Young people understand the value of remaining in education and training up to the age of 18.	Literature review – Bradford Council (2015)
105.	The post-16 education system would be greatly strengthened if pathways to all major occupations are clearly outlined from the beginning of Key Stage 4.	Literature review – Bradford Council (2015)
106.	Participation and attainment post-16 directly impact upon life chances for young people.	Literature review – Green Paper Department for Education and Skills (2007)
107.	If a young person continues their education post-16 they are more likely to achieve valuable qualifications, earn more, and lead happier, healthier lives.	Literature review – Department for Education and Skills. (2007). *Raising expectations : staying in education and training post-16*. London. Crown Copyright

108.	No young person should be outside the education and training system before they even reach their 18th birthday.	Literature review – Department for Education and Skills (2007)
109.	It is no longer a sensible option for a young person to leave education for good at 16 in order to seek work.	Literature review – Department for Education and Skills (2007)
110.	There are very significant benefits to young people from staying in education or training until at least the age of 18. They are much more likely to improve their qualifications and skills.	Literature review – Department for Education and Skills (2007)
111.	Increasing post-16 participation is a crucial part of increasing the skill levels of the workforce.	Literature review – Department for Education and Skills (2007)
112.	Make available the right provision post-16 to keep them engaged and motivated to achieve. Raising the compulsory participation age could do this.	Literature review – Department for Education and Skills (2007)
113.	We recognise that some young people want to start earning and that they can gain valuable knowledge and skills from employment. But it is important for them to continue learning and achieving too.	Literature review – Department for Education and Skills (2007)
114.	We are letting young people down by allowing them to leave education and training for good at the age of 16, knowing that they are not adequately prepared for the life they will have to lead.	Literature review – Department for Education and Skills (2007)
115.	Higher attainment and longer participation in education post-16 brings benefits to the individual young person, to the economy and to society.	Literature review – Department for Education and Skills (2007)

116.	Young people who remain in education or training and improve their levels of qualifications and skills, will find it easier to find employment in jobs that will pay higher salaries. They are less likely to commit crime or behave anti-socially, and more likely to be healthy and have good social skills.	Literature review – Department for Education and Skills (2007)
117.	In post-16 education young people need to be working towards recognised qualifications which are widely understood and provide a good basis for progression.	Literature review – Department for Education and Skills (2007)
118.	Extending compulsory participation leads to increased attainment.	Literature review – Department for Education and Skills (2007)
119.	The purpose of the post-16 education system is to help each and every individual reach their potential.	Literature review – Department for Education and Skills (2005). *14-19 Education and Skills.* London. Crown Copyright.
120.	School does not prepare you for the choices you have to make about staying on in post-16.	Literature review – Worth, S. (2002). Education and Employability: school leavers' attitudes to the prospect of non-standard work. *Journal of Education & Work*, *15*(2), 163–180.
121.	It is difficult to make decisions about post-16 opportunities when you are unsure of your career pathway.	Literature review – Worth (2002)

122.	Having the freedom to choose any option in post-16 can be overwhelming. It is difficult to make choices when previously those choices have been decided for you.	Literature review – Worth (2002)
123.	Careers advice is only helpful when you have a career pathway in mind.	Literature review – Worth (2002)
124.	Decisions about post-16 opportunities are influenced by what your interests, thoughts and feelings are at the time.	Literature review – Worth (2002)
125.	Post-16 education and training should offer a broad range of opportunities that can be integrated, allowing for a change of options.	Literature review – Worth (2002)
126.	Young people have only a vague notion of what their preferred occupation involves, making it difficult to select post-16 education and training options.	Literature review – Blenkinsop, S., McCrone, T., Wade, P., & Morris, M. (2006). *How Do Young People Make Choices at 14 and 16?* London. Crown Copyright.
127.	Post-16 education and training helps you to gain qualifications in order to obtain employment or enter higher education (university).	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)
128.	Some young people may want to leave education at 16 attaching a greater weight to immediate earnings than to a future career.	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)
129.	Staying on in education and gaining qualifications may not lead to a job; personal contacts and luck are what really counts.	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)
130.	I am more likely to want to stay on in post-16 education if my friends are.	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)

131.	Parents set boundaries within which options about post-16 education and training are made.	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)
132.	Work-based training is second best, and of little market value.	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)
133.	Work-based training gives you the chance to earn wages while learning a skill.	Literature review – Blenkinsop, McCrone, Wade, and Morris (2006)
134.	The feeling of disengagement in education makes it difficult to select options regarding post-16 education and training.	Literature review – Haywood, N., Walker, S., O'Toole, G., Hewitson, C., Pugh, E., & Sundaram, P. (2009). *Engaging all young people in meaningful learning after 16: A review Learning and Skills Network (LSN) and Skill: National Bureau for Students with Disabilities*. Manchester. Human Rights and Equality Commissioner.
135.	Post-16 options offer young people the chance to re-engage in education and training.	Literature review – Haywood et al. (2009)
136.	Improving flexibility in provision post 16 to attract new learners and encourage previously disengaged young people to re-engage is important.	Literature review – Haywood et al. (2009)

137.	An emphasis on life skills or 'soft' skills is an important element of post-16 provision because these they are essential for helping young people to enter employment and become independent in life.	Literature review – Haywood et al. (2009)
138.	It is important for different agencies working with young people, such as teachers, youth workers, and Connexions personal advisers to coordinate their activities so that young people do not experience fragmentated provision and learning.	Literature review – Haywood et al. (2009)
139.	Increased opportunities for work-based and practical learning may improve young people's engagement with more formal learning.	Literature review – Haywood et al. (2009)
140.	The majority of young people find it easier to decide what to do after leaving year 11.	Literature review – Spielhofer, T., Benton, T., Evans, K., Featherstone, G., Golden, S., Nelson, J., & Smith, P. (2009). Increasing Participation: Understanding Young People who do not Participate in Education or Training at 16 and 17 Research Report DCSF-RR072. Retrieved from: https://www.nfer.ac.uk/publications/PEJ01/PEJ01.pdf

141.	Post-16 education and training needs to offer flexible provision in terms of start dates in order to accommodate young people who want to change direction.	Literature review – Spielhofer et al. *(*2009)
142.	Young people should be able to do work experience for at least a whole term in year 10–11, so that students are able to make a more informed decision on what subjects to choose post-16.	Blog – www.states of mind.org Breaking the Silence. States of Mind's Student Working Group responds to Ofsted's Consultation (2019).
143.	16-year-olds are old enough to be able to make their own choices and should be free to choose whether to stay on in education or training post-16.	Literature review – Children's Commissioner (2007)
144.	Young people who barely attend school now will not engage in post-16 education and training.	Literature review – Children's Commissioner (2007)
145.	A good level of educational achievement is crucial in being able to enjoy the full range of life chances.	Literature review – Children's Commissioner (2007)
146.	Better income prospects and career choices are dependent on success in education.	Literature review – Children's Commissioner (2007)
147.	If you are looking for a good job and earn a good amount of money, you're going to have to stay at school and work hard.	Literature review – Children's Commissioner (2007)
148.	High-quality, vocational education can guarantee access to further and higher education and rewarding employment.	Literature review – Wolf, A. (2011). *Review of Vocational Education - The Wolf Report .*

		London. Crown Copyright.
149.	Certain apprenticeships offer a route to good salaries and quick promotion at world-beating firms.	Literature review – Wolf (2011)
150.	Vocational learning has been seen as the poor relation of academic learning.	Literature review – Wolf (2011)
151.	The qualifications I gain in secondary school limit may options for post-16 education and training.	Literature review – Widdowson, J. (2018). *Mending the Gap Are the needs of 16-18 year olds being met?* Retrieved from: www.campaignforlearning.org.uk
152.	Leaving school at 16 gives you an opportunity to make a fresh start.	Literature review – Lawy, R., & Diment, K. (2009). Responding to the "needs" of young people in jobs without training (JWT): critical research on evidence-based policy and practice. Retrieved from: http://www.leeds.ac.uk/educol/documents/181942.pdf
153.	Higher qualifications do not necessarily lead to a job.	Literature review – Lawy and Diment (2009)

154.	Opportunities for young people to sample different work experiences need to be made more accessible in post-16 education and training.	Literature review – Lawy and Diment (2009)
155.	Young people need clear, high-quality and easy-to-understand options at 16.	Literature review – Department for Education (2019) *Improving higher technical education.* London. Crown Copyright.
156.	Post-16 education and training provides second chances to those who either did not achieve the expected outcomes in school.	Literature review – Hupkau, C., McNally, S., Ruiz-Valenzuela, J. and Ventura, G. (2017). Post-Compulsory Education in England: Choices and Implications, *National Institute of Economic Review,* 240 (1), 42-57.
157.	Educational institutions and their admission, selection and certification processes may play a significant role in the decisions young people make regarding post-16 education and training.	Literature review – Iannelli, C., Paterson, L., & 35, N. (2005). Does Education Promote Social Mobility? Retrieved from: http://www.ces.ed.ac.uk/PDF Files/Brief035.pdf
158.	Staying on in education post-16 is for those who wish to go to university.	Literature review – Payne, J. (2003). Choice at the end of compulsory schooling: A research review. Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/download?rep=rep1&type=pdf&doi=10.1.1.202.1537
159.	Leaving school at 16 is an economically rationale decision.	Literature review – Wright, S. (2005). *Briefing Paper 4: Young people's decision-making in*

		14-19 education and training: a review of the literature. Retrieved from: www.nuffield14-19review.org.uk
160.	School should do more to prepare you for the choices you have to make about post-16 education and training.	Literature review – Bloomer, M., & Hodkinson, P. (1997). *Moving into FE: the voice of the learner.* London. Further Education Development Agency.
161.	Careers advice regarding post-16 choices is good in school.	Focus group – year 10 secondary school pupils
162.	The option of undertaking work experience in year 10 and 11 will help you to decide if you want to follow a specific career.	Focus group – year 10 secondary school pupils
163.	Friends will influence the choices you make and where you go to college or sixth form.	Focus group – year 10 secondary school pupils
164.	A transition programme to sixth form or college would help to support engagement in further education.	Focus group – year 10 secondary school pupils
165.	You may not always get on to the course of choice in college or sixth form.	Focus group – year 10 secondary school pupils
166.	It is important to stay on in education as it determines your future.	Focus group – year 10 secondary school pupils
167.	Good education promotes opportunities in the workplace.	Focus group – year 10 secondary school pupils

168.	College lacks a good range of opportunities.	Focus group – year 10 secondary school pupils
169.	Sixth form and colleges are elitist and discriminate against you based on your current qualifications.	Focus group – year 10 secondary school pupils
170.	Visits to sixth forms and colleges help to support the decision-making process.	Focus group – year 10 secondary school pupils
171.	There are more opportunities in sixth form compared to college, for example more independent and structured full-time courses.	Focus group – year 10 secondary school pupils
172.	Colleges have a more relaxed structure to promote independence however this may lead to young people not making progress as they are not ready for that level of independence.	Focus group – year 10 secondary school pupils
173.	Sixth forms are more structured, semi-independent having adult oversight, encouraging you to engage in post-16 learning and promoting your future outcomes.	Focus group – year 10 secondary school pupils
174.	College did not prepare you for university or the world of work.	Focus group – year 10 secondary school pupils
175.	Sixth form does prepare you for university.	Focus group – year 10 secondary school pupils
176.	If you leave education at 16 you will not have the experience or knowledge to enter the world of work.	Focus group – year 10 secondary school pupils
177.	Young people require more support in school to prepare them for post-16 education and training.	Focus group – year 10 secondary school pupils

178.	Sixth form develops your independence in preparation for adult life.	Focus group – year 10 secondary school pupils
179.	Staying on in education helps you to get a job.	Focus group – year 10 secondary school pupils
180.	Some schools do not support you to make choices about your future career.	Focus group – year 10 secondary school pupils
181.	Limited opportunities in the labour market means you need to stay on in education longer.	Focus group – year 10 secondary school pupils
182.	It is helpful to keep your options open and select a range of courses in sixth form or college to maximise your changes of obtaining employment in the future.	Focus group – year 10 secondary school pupils
183.	Volunteering is beneficial and helps to build up your work experience.	Focus group – year 10 secondary school pupils
184.	Parents and teachers influence the decisions you make about courses you select to study post-16.	Focus group – year 10 secondary school pupils
185.	Choices you make about courses to study post-16 are often based on subject areas you like and enjoy.	Focus group – year 10 secondary school pupils
186.	Apprenticeships are helpful as you can study and gain work experience.	Focus group – year 10 secondary school pupils
187.	Apprenticeships increase your chances of obtaining employment in the future.	Focus group – year 10 secondary school pupils

188.	Apprenticeships are seen as inferior to degrees by employers.	Focus group – year 10 secondary school pupils
189.	Employers looks for certain qualifications.	Focus group – year 10 secondary school pupils
190.	Sixth forms are competitive and look for young people with high grades and a string of qualifications.	Focus group – year 10 secondary school pupils
191.	The choices you make about post-16 education and training are influenced by where you friend chooses to study. It is important to stay with your friends and maintain those relationships.	Focus group – year 10 secondary school pupils
192.	Post-16 education and training is academically challenging.	Focus group – year 10 secondary school pupils
193.	Staying on in education post-16 leads to higher earning potential.	Literature review – Bono, E. Del, & Galindo-Rueda, F. (2006). The Long Term Impacts of Compulsory Schooling: Evidence from a Natural Experiment in School Leaving Dates. Retrieved from http://www.iser.essex.ac.uk/pubs/workpaps/
194.	Staying on in education post-16 leads to the attainment of higher-level qualifications.	Literature review – Thompson, R. (2009). Social class and participation in further education: Evidence from the Youth Cohort Study of England and Wales. *British Journal of Sociology of Education*, *30*(1), 29–42.

195.	Leaving school at 16 with no qualifications can result in a young person being not in employment, education or further training.	Literature review – Thompson (2009)
196.	Participating in education post-16 ensures that all young people are achieving the necessary qualifications to fulfil their career aspirations.	Literature review – Department for Education and Skills (2007)
197.	Young people who do not participate in education or training post-16 are being let down by society as it is no longer viable to enter the workplace at 16.	Literature review – Department for Education and Skills (2007)
198.	Decisions young people make about education and training at 16 have a significant impact on their future career prospects.	Literature review – Department for Education and Skills (2007)
199.	Compelling young people to stay on in education will lead to improved outcomes.	Literature review – Spielhofer, T., Walker, M., Gagg, K., Schagen, S., & O'Donnell, S. (2007). Raising the Participation Age in Education and Training to 18 Review of Existing Evidence of the Benefits and Challenges. London. National Foundation for Educational Research
200.	Post-16 education and training courses should offer students breadth and depth with the opportunity to gain real experience in the workplace to enhance their employability skills.	Literature review – Wolf (2011)

201.	It will be better to encourage young people to participate of their own free will as opposed to operating a system of sanctions for those who refuse to participate	Literature review – Spielhofer (2007)
202.	Post-16 provision leaves young people equipped for the rapidly changing labour market.	Literature review – Spielhofer (2007)
203.	Young people should be given the option as to whether they wish to remain in education post-16.	Literature review – Villeneuve-Smith, F., Marshall, L. and Munoz, S. (2007). *Raising the Leaving Learning Age: Are the Public Convinced? A Survey of Parents and Teenagers*. London: Learning Skills Network.
204.	Attending further education led to a pointless cycle of unwanted training which may not lead to employment	Literature review – Lawy and Diment (2009)
205.	A lack of funding, availability of provision and awareness of post-16 education and training presents as barriers to engagement in post-16 education and training.	Literature review – Spielhofer et al. (2009)
206.	Participating in post-16 education and training leads to a reduction in the number of young people who are not in education, employment or training.	Literature review – Department for Education (2015). *'Evidence check' memorandum Raising the participation age (RPA)*. Retrieved from: https://www.parliament.uk/documents/commons-

		committees/Education/evidence-check-forum/Raising-participation-age.pdf
207.	Young people aged 16 to 17 gained very little form post-16 education and training.	Literature review – Wolf (2011)
208.	The current post-16 provision is insufficient in meeting the needs of all young people, nor is it promoting their opportunities within the labour market	Literature review – Bradford Council (2015)
209.	Young people should be given the right to voice their opinions about post-16 education and training.	Literature review – Children's Commissioner (2007)
210.	Young people have the energy, enthusiasm and valuable ideas about post-16 education and training provision.	Literature review – Department for Business, Innovation and Skills (2016). *Post-16 Skills Plan*. London. Crown Copyright.
211.	Young people should be given a greater voice in education to ensure that all their needs and aspirations are built in to the design of post-16 educational courses and training.	Literature review – Children's Commissioner (2007)
212.	Young people's educational and training needs post-16 are unmet and their voice is largely unheard.	Literature review – Widdowson (2018)
213.	Many policies in England had been predicated on a set of assumptions about young people and their needs, instead of a representation of their views.	Literature review – Lawy and Diment (2009)

214.	Matching learning opportunities (post-16 pathways) to your interests, needs and aspirations is a difficult and arduous process.	Literature review – Bloomer and Hodkinson (1997)
215.	The government and those with power and influence about making decisions regarding education policies infrequently ask young people their opinions or wishes.	Literature review – Children's Commissioner (2011) Children and young people's views of educational policy. London. Office of Children's Commissioner.
216.	The more education you gain the more jobs you can get.	Literature review – Worth (2002)
217.	High investment in education should lead to permanent employment.	Literature review – Worth (2002)
218.	Higher levels of education would not necessarily facilitate being able to find secure jobs.	Literature review – Worth (2002)
219.	Young people who have attain high-level qualifications at GCSEs ascribe more importance to the role of post-16 education and training for employability.	Literature review – Worth (2002)
220.	Careers advice tended to be narrow in its focus. No attempt to encourage young people to take a broader perspective, to consider related careers.	Literature review – Swift, J. (2009). Education and Employment: the influences on young people's career decision making in Antigua and the UK. University of Huddersfield.

221.	The option of vocational courses and qualifications post-16, for example BTECs, do not carry the same apparent value as academic courses and qualifications.	Literature review – Swift (2009)
222.	Some young people just want to be out earning money, and therefore have no aspirations to undergo further education or training post-16.	Literature review – Swift (2009)
223.	Obtaining academic qualifications is an essential factor in gaining well-paid employment.	Literature review – Swift (2009)
224.	GCSE exam results will dictate the educational and training options available to young people post-16.	Literature review – Mannion (2002)
225.	The ethos, atmosphere and reputations of further education colleges and sixth forms will influence the decisions made about post-16 education and training.	Literature review – Mannion, G. (2002). Open the gates an'that's it 'See ya later!': School Culture and Young People's Transitions into Post-compulsory Education and Training. *Scottish Educational Review*, *34*(1), 89–100.
226.	Career prospects, financial implications and type of work will influence decision-making process regarding post-16 education and training.	Literature review – Mannion (2002)
227.	Young people's aspirations and interests are largely un-uniformed and variable making it difficult to select suitable courses in preparation for engagement in post-16 education and training.	Literature review – Davies, J., & Biesta, G. (2007). Coming to College or Getting out of School? The Experience of Vocational Learning of 14- to 16-

		Year-Olds in a Further Education College. *Research Papers in Education*, *22*(1), 23–41.
228.	Work experience, choice of course and changes in their lives outside of school influences views of post-16 education and training.	Literature review – Davies and Biesta (2007)
229.	Most young people think through and are aware of the consequences of decision-making regarding post-16 education and training on their future career opportunities.	Literature review – Davies and Biesta (2007)
230.	Young people value having sufficient time to make choices, detailed, clear and impartial information on post-16 courses and pathways to ensure they make informed decisions.	Literature review – Davies and Biesta (2007)
231.	The quality and coverage of apprenticeships post-16 is poor.	Website – National Union of Teachers (2019). https://www.nasuwt.org.uk
232.	Financial cuts to post-16 education and training have had a negative impact on the provision available.	Literature review – National Union of Teachers (2019)
233.	Post-16 provision is not integrated making it difficult to make decisions about educational pathways relating to career aspirations.	Literature review – National Union of Teachers (2019)
234.	Young people need clear, high-quality and easy-to-understand options at 16.	Literature review – Guardian newspaper article (2019) England's post-16 qualifications to be streamlined.
235.	A-levels offer a great route to degree level study.	Blog – Parent Zone (2015)

236.	Vocational courses are designed to help young people learn in a practical way about a specific job area – helping them to get the skills needed to start a job, progress in a career or go on to higher levels of education.	Blog – Parent Zone (2015)
237.	Young people are being asked to make huge choices about post-16 education and training that may dictate the rest of their lives.	Website – Careers online UK (2019). Retrieved from: https://www.ckcareers.org.uk/ young-people/options-after-y11
238.	The next step after GCSEs is tricky. There are a number of post-16 options.	Website – rate my apprenticeship – post-16 options (2019). Retrieved from:https://www.ratemyapprenticeship.co.uk/advice/post-16-options
239.	A-levels are too narrow in scope and not fit for purpose to equip young people with the skills they need in the 21st century workplace.	Website – Royal Society calls for an independent review of post-16 education (2019). Retrieved from: https://royalsociety.org/news/2019/02/call-for-independent-review-of-post-16-education/
240.	Young people are not given the full picture of the range of academic and vocational learning options available to them post-16.	Literature review – McLarty, L. and Moran, R. (2009). *Engaging all, young people meaningful*

		learning after 16: A qualitative study. Manchester Equality and Human Rights Commission
241.	Many young people believe that they will have to stay in school and complete academic qualifications until they are 18.	Literature review – McLarty and Moran (2009)
242.	Young people can inform the development of practical solutions to ensure that learning post-16 is as engaging as possible.	Literature review – McLarty and Moran (2009)
243.	There are limited youth employment schemes in the UK labour market.	Researcher's views
244.	Negative experiences, for example bullying, make it difficult for some young people to engage in post-16 education and training.	Researcher's views
245.	Young people are not ready at 16 to make vital decisions about their academic and career pathway.	Researcher's views
246.	Young people are not aware of all the options available to them regarding post-16 education and training.	Researcher's views
247.	The post-16 education and training offer is dated and does not provide young people with the necessary modern-day skills required for the workplace.	Researcher's views
248.	Relationships between post-16 providers and employers are weak preventing youth employment opportunities.	Researcher's views
249.	Adults taking on a career advisory role lack the knowledge to advise young people on appropriate pathways to their preferred career choice.	Researcher's views

250.	Academic courses, for example A-levels, fail to provide a clear pathway to feasible career pathways.	Researcher's views
251.	Academic courses on offer post-16 do not match up with the employment opportunities on offer in the workplace.	Researcher's views
252.	There is a lack of a clear pathway between post-16 courses and future employment opportunities or careers.	Researcher's views

7. Pilot Q-set of 55 Statements

The highlighted statements have been removed and merged with other statements.

1) Choices young people make about education and training after year 11 are based on their interests, likes and beliefs.	2) It is hard to make decisions about education and training as young people's interests and aspirations may change after year 11.	3) Young people have valuable ideas and should be involved in the design and development of college/sixth form provision.
4) Young people should be given the option of whether to remain in education or training after year 11.	5) When decisions are made about education and training opportunities beyond 16, young people are not asked for their views.	6) There aren't enough educational and training options beyond 16 to suit the needs of all young people.
7) Young people often select a range of courses to maximise their chances of getting a job in the future.	8) Young people with high-level GCSE qualifications believe it is more important to stay on in education after year 11.	9) Work experience opportunities after year 11 are unheard of. Reworded.
10) A competitive workforce and limited jobs mean young people need to stay on in education longer. Reworded.	11) Education and training opportunities available after year 11 are limited as a result of funding cuts.	12) The transition from school to college/sixth form is not well organised. Reworded.
13) There a too many educational and training courses on offer after year 11, making it difficult to know which course to select.	14) Alternative educational courses offering practical/ work-based courses are limited. Reworded.	15) Colleges and sixth forms select young people with the highest GCSE grades.
16) Young people who achieve a number of GCSE qualifications are more suited full-time education after year 11.	17) For young people who did not enjoy school, the idea of staying on after year 11 is daunting. Reworded.	18) Educational and training opportunities after year 11 do not match the expectations of young people and their parents. Reworded.
19) Employers believe that apprenticeships and work-based training are not as good as A level qualifications.	20) Where you live can limit the educational and training opportunities that are available. Reworded.	21) Carrying on in education or training after year 11 is pointless as it may not lead to a job.

22) Volunteering after year 11 is beneficial and promotes your chances of getting a job.

23) A-levels offer a clear pathway to university and employment.

24) Vocational courses and work-based learning, for example apprenticeships, and internships help young people to gain the relevant experience to get a job.

25) The quality of vocational courses for example apprenticeships, internships and technical courses is poor. Reworded.

26) The variety of vocational courses for example apprenticeships, internships and technical engineering courses is limited.

27) Young people who stay on in education or training after year 11 do not gain the necessary skills to enter the job market at 18. Reworded.

28) Young people should be given the right to change their mind about the courses they select after year 11.

29) There are more structured full-time learning opportunities in sixth form as opposed to college.

30) There should be an option for some young people to access more practical courses at secondary school to ensure they stay on in education or training after year 11. Reworded.

31) Leaving school at 16 is a better option as it gives you the opportunity to make a fresh start.

32) Staying on in education or training after year 11 leads to higher level of skills and qualifications.

33) Staying on in education after year 11 improves your chances of being able to go to university.

34) The more time spent in education has benefits for the wider society, by making young people more skilled.

35) Staying on in education or training after year 11 increases your earning potential.

36) Staying on in education and training post-16 improves your chances of gaining employment.

37) Gaining higher level qualifications leads to a successful and well-paid career.

38) All young people want to stay in education or training post-16.

39) Decisions young people make about education or training at 16 have a significant impact on their future career prospects.

40) Young people should be offered careers advice and work experience from year 9 to help them make informed decisions about education and training after year 11.

41) Leaving school at 16 heightens the risk of future unemployment. Reworded.

42) Staying on in education or training after year 11 provides a second chance to young people who did not achieve the expected outcomes at school.

43) Young people who do not participate in education or training after year 11 are being let down by society as it is hard to get a job.

44) Making young people stay on in education or training after year 11 will give them the skills and knowledge to succeed in the workplace.

45) Personal contacts and luck are what really counts, rather than staying on in education or training after year 11. Reworded.

8. Final Q-set

1) Young people choose to study courses after year 11 based on their likes and interests.
2) Young people do not know what they want to study or train as at 16.
3) Young people should be involved in the design of courses on offer after 16.
4) Young people should not be made to stay on in education or training at 16.
5) Young people have not been asked if they want to stay on in education or training after year 11.
6) Educational and training opportunities after year 11 are not suitable.
7) Young people often select a range of courses with no clear career pathway in mind.
8) Career guidance and support is poor and not offered early enough.
9) There aren't any work experience opportunities after year 11.
10) Limited jobs mean young people have to stay on in education longer.
11) Young people choose to study at the same place as their friends after year 11.
12) Family members offer the best advice about what and where to study at 16.
13) There is too much choice, making it hard to choose a suitable course after year 11.
14) Teachers offer the best advice about what and where to study at 16.
15) Colleges and sixth forms select young people with the highest GCSE grades.
16) Staying on in education after year 11 only suits clever young people.

17) Young people who don't enjoy school do not want to stay on in education after year 11.
18) Independent career advisors are the most helpful.
19) Employers believe that apprenticeships are not as good as A-level qualifications.
20) Other places have better educational and training opportunities.
21) Who you know helps you to get a job, not staying on in education or training at 16.
22) Volunteering after year 11 increases your chances of getting a job.
23) A-levels offer a clear pathway to university.
24) Apprenticeships, and internships help young people to get a job.
25) There aren't many apprenticeships and internships available.
26) Structured full-time learning opportunities are more suitable at 16.
27) Young people should access college earlier to encourage them to stay on in education at 16.
28) Staying on in education or training after year 11 leads to more qualifications.
29) Staying on in education or training at 16 benefits society.
30) Staying on in education or training after year 11 leads to a successful career.
31) Staying on in education and training at 16 increases your chances of getting a job.
32) Leaving school at 16 leads to unemployment.
33) All young people want to stay in education or training after year 11.

34) Colleges promote a young person's learning independence.
35) The decisions made about education at 16 impact on future job opportunities.
36) Academic courses do not provide young people with the skills required for the modern-day job market.
37) Funding cuts have reduced the variety of courses on offer after year 11.
38) Young people after year 11 are not given the opportunity to learn vital life skills.
39) Young people rule out certain education and training providers owing to their poor reputation.
40) Schools and education providers work well together to promote clear pathways for young people.
41) Male students and female students make different choices about courses available after year 11.

9. Ethical Approval

The University of Nottingham
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SJ/tp

Ref: S1165

Wednesday 3rd April 2019

Dear Christa and Nathan,

Ethics Committee Review

Thank you for submitting an account of your proposed research **"Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities".**

That proposal has now been reviewed and we are pleased to tell you it has met with the Committee's approval.

However:
Please note the following comments from our reviewers;

Reviewer One:
Minor Revisions

- Information sheet for parents/carers needs to make clearer that the parent/carers' child is the person who participates in the actual study (e.g., this is an invitation for you and your child to take ..."). The information sheet could be made clearer by removing the reference to Q sort (which could be unclear for the reader) and just refer to the task. For example, "...on a separate occasion they will take part in a Q sort where they will be asked to rank a number of statements separating these in to ones they agree with, are not sure of and disagree with." could be changed to "...on a separate occasion they will be asked to rank a number of statements separating these in to ones they agree with, are not sure of and disagree with."

- Information sheet for parents/carers should also mention that their child will be provided with an information sheet and that they also sign a consent form and that the child only take part when the parent/carer and child have both agreed to take part and signed the consent forms.

- The statement in the consent form for parents/carers:

  "Give permission for my child's data from this pilot study to be shared with other researchers provided that my anonymity is completely protected." should be changed to…
  "Give permission for my child's data from this pilot study to be shared with other researchers provided that **my and child's** anonymity is completely protected."

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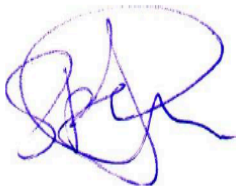
Reviewer Two:
Minor Revisions

- A GDPR privacy notice would need to added to the application

Final responsibility for ethical conduct of your research rests with you or your supervisor. The Codes of Practice setting out these responsibilities have been published by the British Psychological Society and the University Research Ethics Committee. If you have any concerns whatever during the conduct of your research then you should consult those Codes of Practice. The Committee should be informed immediately should any participant complaints or adverse events arise during the study.

Independently of the Ethics Committee procedures, supervisors also have responsibilities for the risk assessment of projects as detailed in the safety pages of the University web site. Ethics Committee approval does not alter, replace, or remove those responsibilities, nor does it certify that they have been met.

Yours sincerely



Professor Stephen Jackson
Chair, Ethics Committee

10. Participant Information Sheet

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

Title of Project: **Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities**

Insert Ethics Approval Number or Taught Project Archive Number

Researchers: Christa Lyons

Supervisors: Nathan Lambert

Contact Details: lpxcdl@nottingham.ac.uk

This is an invitation for you to take part in a research study exploring the viewpoints of young people regarding post-16 education and training opportunities.

Before you decide if you wish to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. You will be asked to also sign a consent form. You will only take part when you and your parents have both agreed to take part and signed the consent forms.

If you agree to participate you will be asked to rank a number of statements separating these into ones they agree with, are not sure of and disagree with. Once you have sorted these statements in three piles, you will be asked to put these statements in to a distribution grid, representing how much you agree or disagree with them. You will be asked to answer a short questionnaire post sort asking you about your gender, year group, plans after year 11 and any comments you would like to share.

The sort should last around an hour dependent on how long it takes you and others to complete the sort. The sort will take place in school time and I will work with the school to ensure that you do not miss a lesson you feel is important to you.

Participation in this study is totally voluntary and you are under no obligation to take part. You are free to withdraw at any point before or during the study. All data collected will be kept confidential and used for research purposes only. It will be stored in compliance with the General Data Protection Regulation (GDPR) Act.

If you have any questions or concerns, please don't hesitate to ask at any point. We can also be contacted after your participation at the above address.

If you have any complaints about the study, please contact:
Stephen Jackson (Chair of Ethics Committee)
stephen.jackson@nottingham.ac.uk

11. GDPR Privacy Information Sheet

GDPR: Research Participant Privacy Notice

Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities

Insert Ethics Approval Number or Taught Project Archive Number

Researcher: Christa Lyons

Contact Details: lpxcdl@nottingham.ac.uk

Supervisor: Nathan Lambert

Contact Details: nathan.lambert@nottingham.ac.uk

Privacy information for Research Participants

For information about the University's obligations with respect to your data, who you can get in touch with and your rights as a data subject, please visit: www.nottingham.ac.uk/utilities/privacy/privacy.aspx.

Why we collect your personal data

Your personal data is being collected as part of a research project. The researcher is part of a doctorate programme in Applied Educational Psychology, at the University of Nottingham. The purpose of the research is to gather the viewpoints of young people regarding post-16 education and training opportunities.

Legal basis for processing your personal data under GDPR

The legal basis for processing your personal data on this occasion is in line with GDPR Article 6(1e) processing is necessary for the performance of a task carried out in the public interest. We hope this research will help with meeting the needs of all of young people entering post-16 provision, and help educational settings and other professionals learn more about young people's decision-making informing the development of appropriate educational pathways for all pupils.

Where the University receives your personal data from

Some personal data about you will be collected as part of the research, which will be kept confidential. This data will come either from yourself, as the research participant, or from school records.

Special category personal data

We will be collecting some 'special category personal data', in line with GDPR Article 9(2a). We will collect, with your consent, data regarding your racial or ethnic origin.

How long we keep your data

The University may store your data for up to 25 years and for a period of no less than 7 years after the research project finishes. The researchers who gathered or processed the data may also store the data indefinitely and reuse it in future research. Any data stored will

be anonymised, meaning that participants will not be identifiable. Any data that might identify a participant will be left out of the analysis. All participants will be given a number in the research to protect their identity.

Who we share your data with

Extracts of your data may be disclosed in published works that are posted online for use by the scientific community. Your data may also be stored indefinitely on external data repositories (e.g., the UK Data Archive) and be further processed for archiving purposes in the public interest, or for historical, scientific or statistical purposes. It may also move with the researcher who collected your data to another institution in the future.

12. Participant Consent Form

School of Psychology

Consent Form

The University of Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Title of Project: *Title of Project:* **Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities**

Ethics Approval Number or Taught Project Archive Number:

Researcher(s): Christa Lyons- lpxcdl@nottingham.ac.uk

Supervisor(s): Nathan Lambert- nathan.lambert@nottingham.ac.uk

The participant should answer these questions independently:

- Have you read and understood the Information Sheet? YES/NO
- Have you had the opportunity to ask questions about the study? YES/NO
- Have all your questions been answered satisfactorily (if applicable)? YES/NO
- Do you understand that you are free to withdraw from the study? YES/NO (at any time and without giving a reason)
- I give permission for my data from this study to be shared with other researchers provided that my anonymity is completely protected. YES/NO
- Do you agree to take part in the study? YES/NO

"This study has been explained to me to my satisfaction, and I agree to take part. I understand that I am free to withdraw at any time."

Signature of the Participant: Date:

Name (in block capitals)

I have explained the study to the above participant and he/she has agreed to take part.

Signature of researcher: Date:

13. Parent/Carer Information Sheet

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

Title of Project: **Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities**

Insert Ethics Approval Number or Taught Project Archive Number

Researchers: Christa Lyons

Supervisors: Nathan Lambert

Contact Details: lpxcdl@nottingham.ac.uk

This is an invitation for you and your child to take part in a research study exploring the viewpoints of young people regarding post-16 education and training opportunities.

Before you decide if you wish to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Your child will also be provided with an information sheet and will be asked to also sign a consent form. Your child will only take part when you and your child have both agreed to take part and signed the consent forms.

If you agree to participate on behalf of your child, they will be asked to rank a number of statements separating these into ones they agree with, are not sure of and disagree with. Once they have sorted these statements in three piles, they will be asked to put these statements in to a distribution grid, representing how much they agree or disagree with them. They will be asked to answer a short questionnaire post sort asking them about their gender, year group, plans after year 11 and any comments they would like to share.

The sort should last around an hour dependent on how long it takes for them and others to complete the sort. The sort will take place in school time and I will work with the school to ensure that your child does not miss a lesson they feel is important to them.

Participation in this study is totally voluntary and you are under no obligation to take part. You or your child are free to withdraw at any point before or during the study. All data collected will be kept confidential and used for research purposes only. It will be stored in compliance with the General Data Protection Regulation (GDPR) Act.

If you have any questions or concerns, please don't hesitate to ask at any point. We can also be contacted after your child's participation at the above address.

If you have any complaints about the study, please contact:
Stephen Jackson (Chair of Ethics Committee)
stephen.jackson@nottingham.ac.uk

14. Parent/Carer Consent Form

School of Psychology

Consent Form for parents

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

Title of Project: *Title of Project:* **Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities**

Ethics Approval Number or Taught Project Archive Number:

Researcher(s): Christa Lyons- lpxcdl@nottingham.ac.uk

Supervisor(s): Nathan Lambert- nathan.lambert@nottingham.ac.uk

The participant should answer these questions independently:

- Have you read and understood the Information Sheet on behalf of your child? YES/NO
- Have you had the opportunity to ask questions about the study? YES/NO
- Have all your questions been answered satisfactorily (if applicable)? YES/NO
- Do you understand that your child is free to withdraw from the study (at any time and without giving a reason)? YES/NO
- I give permission for my child's data from this study to be shared with other researchers provided that my and my child's anonymity is completely protected. YES/NO
- Do you agree for your child to take part in the study? YES/NO

"This study has been explained to me to my satisfaction, and I agree for my child to take part. I understand that my child is free to withdraw at any time."

Signature of the Participant: Date:

Name (in block capitals)

I have explained the study to the above parent/carer and they have agreed to take part on behalf of their child.

Signature of researcher: Date:

15. Q-sort Instruction Sheet

Activity Instruction sheet

What are the viewpoints of Key Stage four pupils regarding education and training opportunities after Year 11?

School of Psychology, University of Nottingham
Researcher: Christa Rayne
Research Supervisor: Nathan Lambert
Local Authority Supervisor: Lynne Mackey

1. A statement is printed on each of the 40 small cards. These statements are what some people think about educational and training opportunities after year 11.

The aim of this task is to individually rank the statements on the 40 small cards under the headings on the grid. By asking you to rank these statements, I will understand how much you agree or disagree with these statements regarding educational and training opportunities after year 11.
This must be done individually, and the following steps should help you do this.

2. Lay out the grid with the statement at the top (Please rank how much you agree and disagree with these statements). The grid consists of nine columns ranging from statements you most disagree with on the far left to the ones you most agree with on the far right.

This will help you to remember how many statements should go in each column and which way to place the statements (−4 represents the statements you most disagree and 4 represents the statement you most agree with).

3. Read through each of the 40 statements in turn and consider them in relation to the activity statement. As you read the statements, sort them into 3 provisional ranking piles:

- On the right – those that you agree with.
- One the left – those that you disagree with, or agree with much less.
- In the middle – those that you feel indifferent, unsure, or otherwise leave you with mixed feelings.

It doesn't matter how many are in each pile, just be faithful to your own feelings and views.

4. Return to grid with the statement at the top. From the pile on the right, choose 1 statement, which is most like your view and put it under the far right column. It doesn't matter which is on the top and which is on the bottom.

5. From the pile on the left, choose 1 statement, which is least like your view and put it in the far left column.

6. Back to the pile on the right: choose 3 statements, which are more like your view than the others in the pile, but not as much your view as the ones you have already

chosen. Put them in the second column from the right. Move statements around if you change your mind.

7. From the pile on the left, choose 3 statements to place in the second column from the left.

8. Keep doing this taking it in turns with the statements you most disagree with and agree with, working your way towards the middle with the statements you have left over. Do not worry if your ‘agree statements’ cross over into the negative rankings, or if your ‘disagree statements’ cross over into the positive rankings. The ranking system is relative, so the idea is that you rank the statements in relation to each other.

9. Check that you are happy with your arrangement and make any changes needed so that the final card sort represents your view.

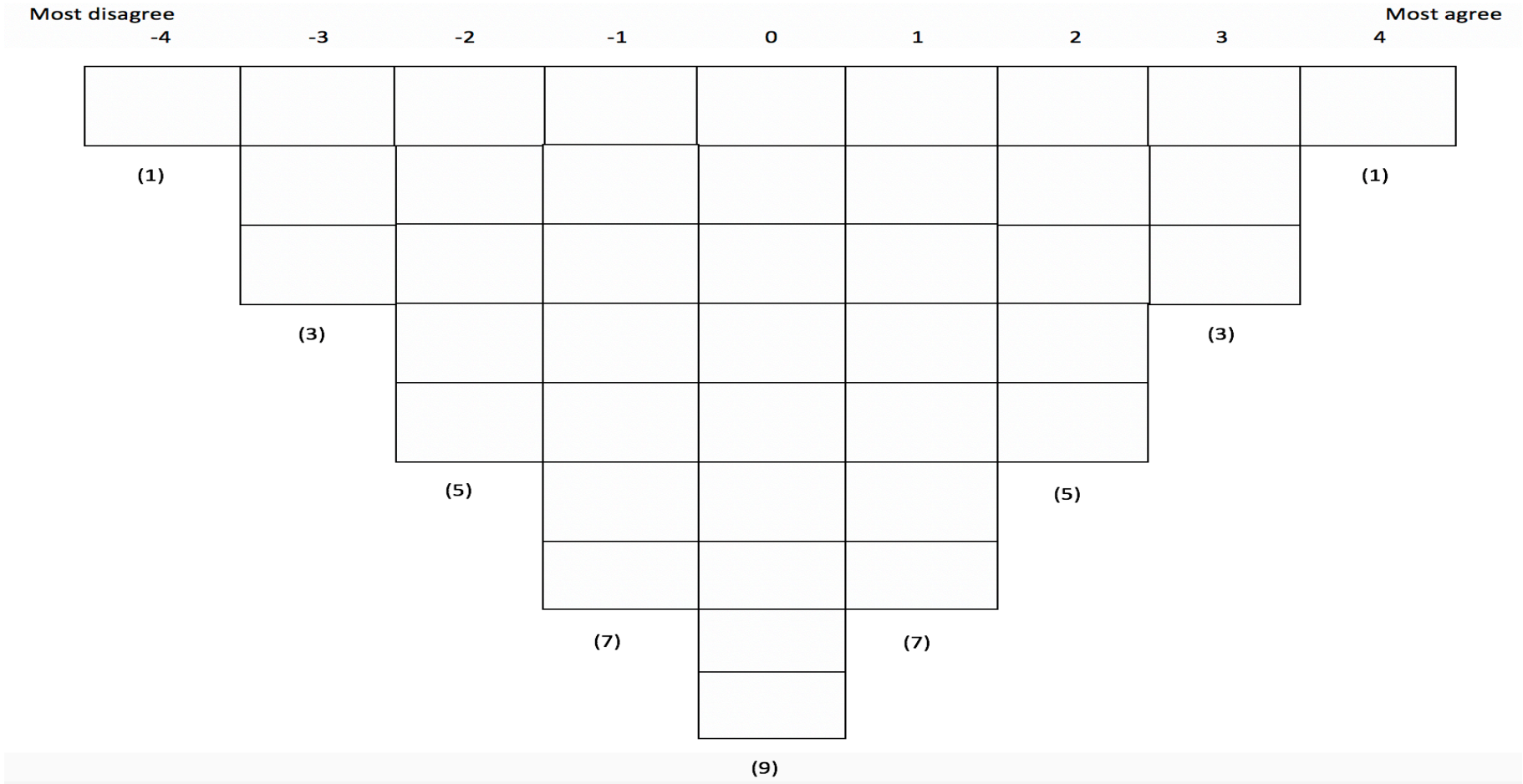
10. Please transfer your sorted statements onto the blank A4 grid (final sort) by writing the number of each statement into the matching boxes. Please take care to make sure that the blank grid is the same as your sorted card statements and that there is a number in each box.

11. On this blank grid named final sort, draw a line where the statements that you disagree with ends and the statements that you agree with starts. An example is shown below.

12. Please complete the Post Activity Questionnaire, as honestly as possible.

13. Please collect a debrief sheet from the researcher before you leave.

16. Blank Distribution Grid



17. Post-sort Questionnaire

Post-sort Questionnaire

Educational Opportunities beyond 16. The Viewpoints of Key Stage Four Young People regarding Educational and Training opportunities after year 11.

School of Psychology, University of Nottingham
Researcher: Christa Rayne
Research Supervisor: Nathan Lambert
Local Authority Supervisor: Lynne Mackey

Gender:_____

Ethnicity:_____

School and year group:

What are your plans for after year 11?

Sixth form ☐
College ☐
Apprenticeship ☐
Internship ☐
Not known ☐

Which statement did you agree with most and is there anything you would like to say about why this was most important?

Which statement did you disagree with most and is there anything you would like to say about why you disagreed?

Are there any comments that you would like to see added to the activity?

Are there any comments that you did not understand or did not make sense to you?

Any other comments?

THANK YOU FOR YOUR PARTICIPATION

Please collect a debrief sheet from Christa before you leave.

18. Debrief Form

Debrief form for participants

Name of Experimenter: Christa Rayne
Email of Experimenter: lpxcdl@nottingham.ac.uk

Name of Supervisor: Nathan Lambert
Email of Supervisor: Nathan.lambert@nottingham.ac.uk

Title of Experiment: **Making decisions about post-16 education or training: Pupils' viewpoints regarding post-16 education or training opportunities**

I would like to thank you for taking part in this focus group/interview and/or Q sort.

What you have done today and over the past few months has been really helpful for me in lots of way. Firstly, you've helped me to understand a little bit about your views on the post-16 education and training opportunities and secondly, you've supported me in carrying out this research by giving up your time and sharing your views and experiences.

It is hoped that by taking part in this research, progress will be made towards making post-16 provision in your local area more suitable for the needs of all young people. I hope that for you it will serve to give you a voice in the planning and shaping of local post-16. I also hope it will provide a platform for your collective views to be shared with educational professionals involved in the design and implementation of post-16 provision in the future.

Have you got any questions about what has happened today or over the last few months? If you require any further information or would like to discuss anything further let me know and I can arrange a time and space to meet with you separately.

19. Crib Sheets

Factor 1 Crib Sheet

Items Ranked at +4
28. Staying on in education or training after year 11 leads to more qualifications.

Items Ranked Higher in Factor 1 Array than in Other Factor Arrays
18. Independent career advisors are the most helpful (+1).
23. A-levels offer a clear pathway to university (+3).
29. Staying on in education or training at 16 benefits society (+1).
32. Leaving school at 16 leads to unemployment (−2).
11. Young people choose to study at the same place as their friends after year 11 (+1).
14. Teachers offer the best advice about what and where to study at 16 (0).
15. Colleges and sixth forms select young people with the highest GCSE grades (+1).
17. Young people who don't enjoy school do not want to stay on in education after year 11 (+2).
19. Employers believe that apprenticeships are not as good as A-level qualifications (+1).
26. Structured full-time learning opportunities are more suitable at 16 (0).
33. All young people want to stay in education or training after year 11 (−2).
39. Young people rule out certain education and training providers owing to their poor reputation (+2).
40. Schools and education providers work well together to promote clear pathways for young people (+2).
30. Staying on in education or training after year 11 leads to a successful career (+3).
31. Staying on in education and training at 16 increases your chances of getting a job (+2).
35. The decisions made about education at 16 impact on future job opportunities (+3).

Items Ranked Lower in Factor 1 Array than in Other Factor Arrays
4. Young people should not be made to stay on in education or training at 16 (−3).
5. Young people have not been asked if they want to stay on in education or training after year 11 (−3).
6. Educational and training opportunities after year 11 are not suitable (−3).
7. Young people often select a range of courses with no clear career pathway in mind (−2).
10. Limited jobs mean young people have to stay on in education longer (−1).
20. Other places have better educational and training opportunities (0).
25. There aren't many apprenticeships and internships available (−1).
34. Colleges promote a young person's learning independence (0).
37. Funding cuts have reduced the variety of courses on offer after year 11 (0).
41. Male students and female students make different choices about courses available after year 11 (−1).
12. Family members offer the best advice about what and where to study at 16 (−2).

27. Young people should access college earlier to encourage them to stay on in education at 16 (−1).
36. Academic courses do not provide young people with the skills required for the modern-day job market (−1).
8. Career guidance and support is poor and not offered early enough (0).
1. Young people choose to study courses after year 11 based on their likes and interests (+2)
17. Young people who don't enjoy school do not want to stay on in education after year 11 (+1).

Items Ranked at −4
16. Staying on in education after year 11 only suits clever young people.

Factor 2 Crib Sheet

Items Ranked at +4
8. Career guidance and support is poor and not offered early enough.

Items Ranked Higher in Factor 2 Array than in Other Factor Arrays
2. Young people do not know what they want to study or train as at 16 (+3).
5. Young people have not been asked if they want to stay on in education or training after year 11 (0).
9. There aren't any work experience opportunities after year 11 (0).
12. Family members offer the best advice about what and where to study at 16 (−1).
25. There aren't many apprenticeships and internships available (+1).
27. Young people should access college earlier to encourage them to stay on in education at 16 (+1).
34. Colleges promote a young person's learning independence (+3).
36. Academic courses do not provide young people with the skills required for the modern-day job market (+2).
37. Funding cuts have reduced the variety of courses on offer after year 11(+3).
38. Young people after year 11 are not given the opportunity to learn vital life skills (+2).
41. Male students and female students make different choices about courses available after year 11 (+1).
7. Young people often select a range of courses with no clear career pathway in mind (+1).
10. Limited jobs mean young people have to stay on in education longer (0).
20. Other places have better educational and training opportunities (+1).
17. Young people who don't enjoy school do not want to stay on in education after year 11 (+2).
16. Staying on in education after year 11 only suits clever young people (−3).
6. Educational and training opportunities after year 11 are not suitable (−2).

Items Ranked Lower in Factor 2 Array than in Other Factor Arrays
13. There is too much choice, making it hard to choose a suitable course after year (−2).
11.Young people choose to study at the same place as their friends after year 11 (−2).

15. Colleges and sixth forms select young people with the highest GCSE grades (−1).
18. Independent career advisors are the most helpful (−2).
22. Volunteering after year 11 increases your chances of getting a job (0).
23. A-levels offer a clear pathway to university (0).
24. Apprenticeships, and internships help young people to get a job (0).
26. Structured full-time learning opportunities are more suitable at 16 (−2).
31. Staying on in education and training at 16 increases your chances of getting a job (+1).
39. Young people rule out certain education and training providers owing to their poor reputation (−1).
40. Schools and education providers work well together to promote clear pathways for young people (−3).
14. Teachers offer the best advice about what and where to study at 16 (−1).
23. A-levels offer a clear pathway to university (0).
28. Staying on in education or training after year 11 leads to more qualifications (+2).
29. Staying on in education or training at 16 benefits society (0).
35. The decisions made about education at 16 impact on future job opportunities (+1).
1. Young people choose to study courses after year 11 based on their likes and interests (+2)
30. Staying on in education or training after year 11 leads to a successful career (−1).

Items Ranked at −4
33. All young people want to stay in education or training after year 11.

Factor 3 Crib Sheet

Items Ranked at +4
24. Apprenticeships, and internships help young people to get a job.

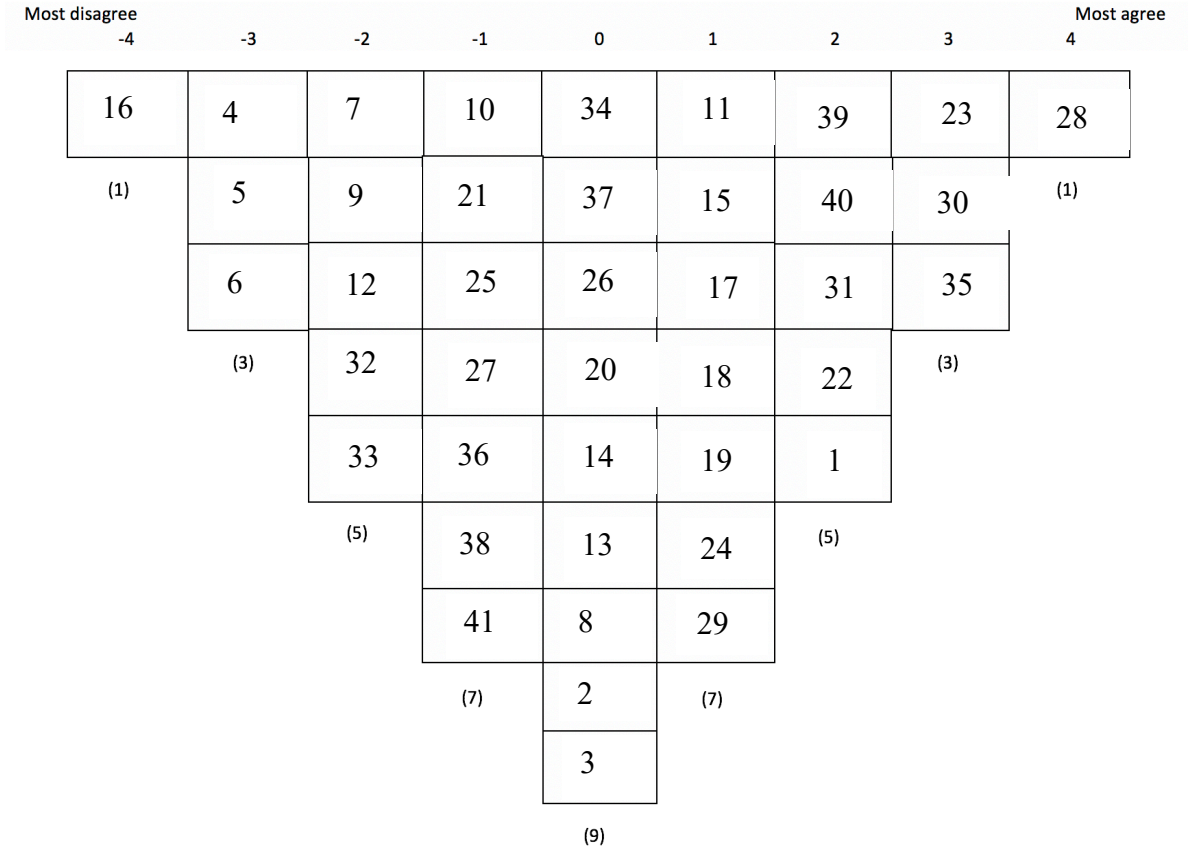
Items Ranked Higher in Factor 3 Array than in Other Factor Arrays
1. Young people choose to study courses after year 11 based on their likes and interests (+3).
4. Young people should not be made to stay on in education or training at 16 (+3).
13. There is too much choice, making it hard to choose a suitable course after year 11 (+1).
22. Volunteering after year 11 increases your chances of getting a job (+3).
3. Young people should be involved in the design of courses on offer after 16 (0).
21. Who you know helps you to get a job, not staying on in education or training at 16 (−1).
26. Structured full-time learning opportunities are more suitable at 16 (0).
31. Staying on in education and training at 16 increases your chances of getting a job (+2).
40. Schools and education providers work well together to promote clear pathways for young people (+2).
7. Young people often select a range of courses with no clear career pathway in mind (+1).

10. Limited jobs mean young people have to stay on in education longer (0).
15. Colleges and sixth forms select young people with the highest GCSE grades (+1).
17. Young people who don't enjoy school do not want to stay on in education after year 11 (+2).
20. Other places have better educational and training opportunities (+1).
16. Staying on in education after year 11 only suits clever young people (−3).
6. Educational and training opportunities after year 11 are not suitable (−2).

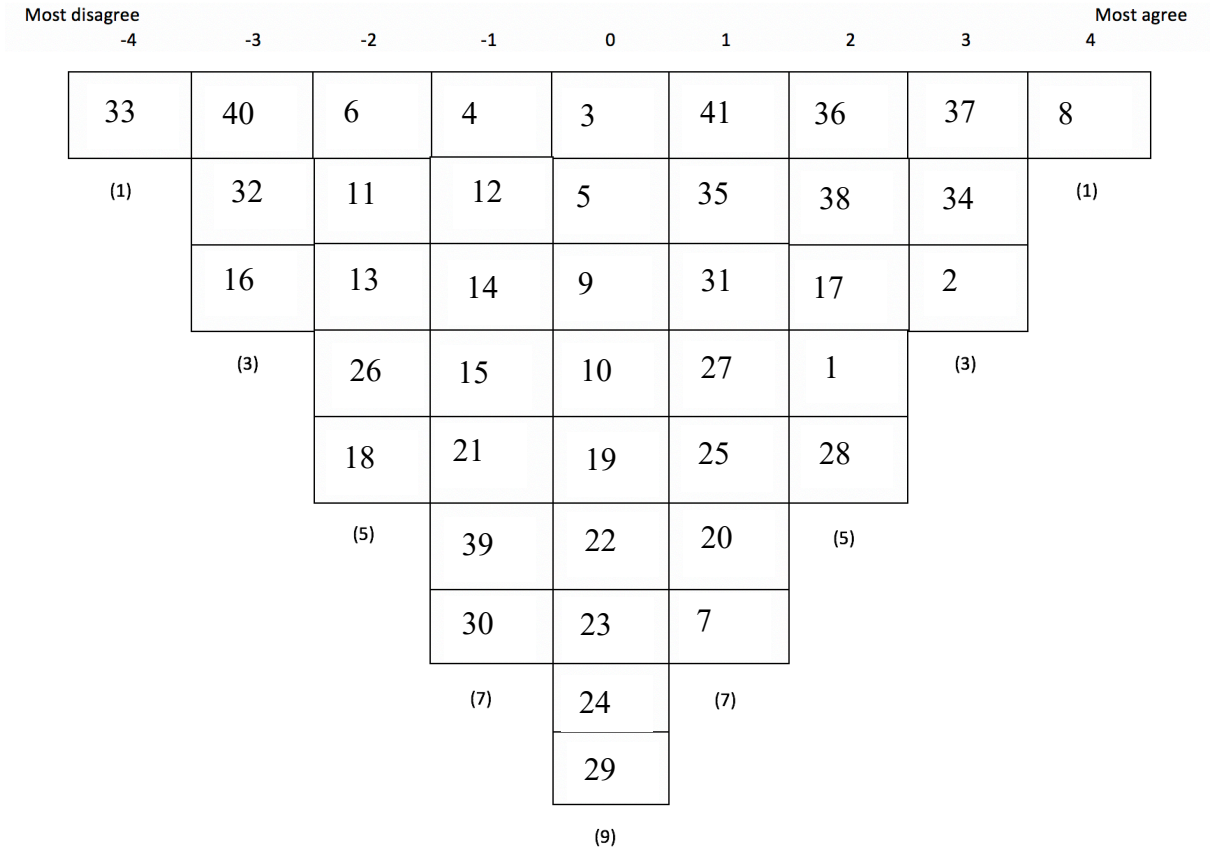
Items Ranked Lower in Factor 3 Array than in Other Factor Arrays
2. Young people do not know what they want to study or train as at 16 (−1).
9. There aren't any work experience opportunities after year 11 (−3).
19. Employers believe that apprenticeships are not as good as A-level qualifications (−2).
38. Young people after year 11 are not given the opportunity to learn vital life skills (−2).
11. Young people choose to study at the same place as their friends after year 11 (−2).
12. Family members offer the best advice about what and where to study at 16 (−2).
14. Teachers offer the best advice about what and where to study at 16 (−1).
23. A-levels offer a clear pathway to university (0).
27. Young people should access college earlier to encourage them to stay on in education at 16 (−1).
28. Staying on in education or training after year 11 leads to more qualifications (+2).
29. Staying on in education or training at 16 benefits society (0).
35. The decisions made about education at 16 impact on future job opportunities (+1).
36. Academic courses do not provide young people with the skills required for the modern-day job market (−1).
14. Teachers offer the best advice about what and where to study at 16 (−1).
8. Career guidance and support is poor and not offered early enough (0).

Items Ranked at −4
32. Leaving school at 16 leads to unemployment.

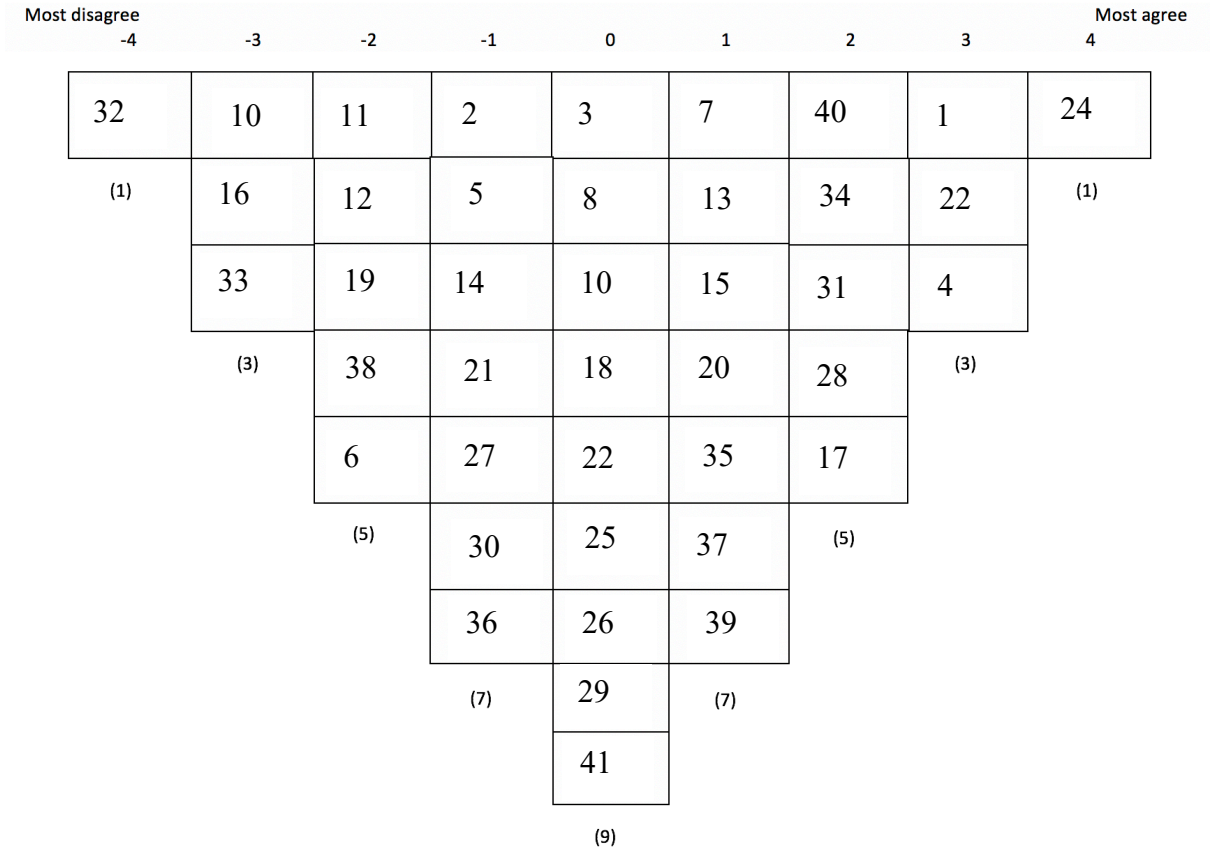
20. Factor Arrays



Factor array for Factor 1 Viewpoint



Factor array for Factor 2 Viewpoint



Factor array for Factor 3 Viewpoint

21. Distinguishing Statements

Each factor array is listed under the three factors. The ranking of each factor array is noted in brackets.

Factor one	Factor two	Factor three
28 (+4)	8 (+4)	24 (+4)
23 (+3)	2 (+3)	1 (+3)
35 (+3)	34 (+3)	4 (+3)
30 (+3)	37 (+3)	22 (+3)
22 (+2)	38 (+2)	34 (+2)
19 (+1)	36 (+2)	13 (+1)
17 (+1)	25 (+1)	37 (+1)
11 (+1)	27 (+1)	18 (0)
18 (+1)	22 (0)	5 (−1)
14 (0)	5 (0)	2 (−1)
34 (0)	9 (0)	19 (−2)
2 (0)	19 (0)	11 (−2)
37 (0)	4 (−1)	9 (−3)
13 (0)	15 (−1)	32 (−4)
10 (−1)	39 (−1)	
41 (−1)	18 (−2)	
33 (−2)	26 (−2)	
32 (−2)	13 (−2)	
7 (−2)	11 (−2)	
9 (−2)	32 (−3)	
5 (−2)	40 (−3)	

4 (−2)		