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Choices that students make between academic, technical and vocational routes post-18 and whether these choices are effective and reliably informed: Review of relevant literature and evidence

Draft Final Report

June 2018

Peter Dickinson, Institute for Employment Research, University of Warwick
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1.1. Introduction

TO DO WHEN FULL REPORT IS AGREED

1.2. Key Findings

This report is structured to address each of the key research questions in turn: the main findings for each of these questions are set out below.

1.1.1. (RQ1) Choices between Higher Education (HE), Further Education (FE) and Apprenticeships.

(RQ1a) How do students choose between HE, FE and apprenticeship routes and who influences the choices they make (for e.g. parents, peers, pre-18 teachers?)

(RQ1b) What are the most important factors when marginal students (i.e. those on the HE-FE borderline) choose between HE and FE? For similar outcomes and qualifications; why do students choose more costly HE routes rather than lower cost FE routes?

(RQ1c) How do students seek out FE and apprenticeship courses and opportunities?

(RQ1d) What is the effectiveness of different information, advice and guidance (IAG) routes, and which routes do students use?
(RQ1e) When choosing between HE, FE and apprenticeships what role do the following play: location; outcomes/salary; career pathway/plan; passion/personal fulfilment/career calling

(RQ1f) How have the factors influencing student choice changed over time? (i.e. before 9k tuition fees vs. under the current system).

1.1.2. (RQ2) Choices within HE and FE.

(RQ2a) Which factors influence students’ choice of: institution; course; mode of study/length of course (full or p/t or accelerated); location (i.e. living at home or leaving home.)

(RQ2b) When choosing between courses/pathways what role do the following play: outcomes/salary; passion/personal fulfilment/career calling; signalling (of the value of the qualification)

1.1.3. (RQ3) Finance.

(RQ3a) How does the available information about finance (e.g. relating to fees, loans, bursaries, accommodation rates etc.) influence the choices students make?

(RQ3b) What is the impact of the funding system on choice in other developed countries?
1.1.4. (RQ4) Mature students.

(RQ4a) Which factors shape mature students’ choices?

(RQ4b) In which ways do these factors impact on mature students in the following groups those: from disadvantaged backgrounds; seeking to retrain; who previously pursued an FE or level 4/5 route and go back to HE?
1. Introduction

DfE require a review of relevant literature and evidence into choices that students make between academic, technical, and vocational routes after 18, and whether these choices are effective and reliably informed. This work will feed into the evidence base for the Review of post-18 education and funding announced on 19th February 2018.

The literature review should improve our knowledge of how students makes choices about their education and what information and guidance they use to make these choices.

1.1. Project aim

The aim of the literature and evidence review was to improve the Department for Education’s (DfE) knowledge of how students makes choices about their education and what information and guidance they use to make these choices.

Within this overall aim, the review seeks to answer the following key research questions (RQs):

1. (RQ1) Choices between Higher Education (HE), Further Education (FE) and Apprenticeships.
   - (RQ1a) How do students choose between HE, FE and apprenticeship routes and who influences the choices they make (for e.g. parents, peers, pre-18 teachers? 
   - (RQ1b) What are the most important factors when marginal students (i.e. those on the HE-FE borderline) choose between HE and FE? For similar outcomes and qualifications; why do students choose more costly HE routes rather than lower cost FE routes? 
   - (RQ1c) How do students seek out FE and apprenticeship courses and opportunities? 
   - (RQ1d) What is the effectiveness of different information, advice and guidance (IAG) routes, and which routes do students use? 
   - (RQ1e) When choosing between HE, FE and apprenticeships what role do the following play: 
     i. Location 
     ii. Outcomes/salary 
     iii. Career pathway/ plan 
     iv. Passion/ personal fulfilment/ career calling 
   - (RQ1e) How have the factors influencing student choice changed over time? (i.e. before 9k tuition fees vs. under the current system).

2. (RQ2) Choices within HE and FE.
   - (RQ2a) Which factors influence students’ choice of: 
     i. institution, 
     ii. course, 
     iii. mode of study / length of course (full or p/t or accelerated)
iv. location (i.e. living at home or leaving home.)

- **(RQ2b)** When choosing between courses/pathways what role do the following play:
  i. outcomes/salary
  ii. passion/personal/fulfilment/career calling
  iii. signalling (of the value of the qualification)

3. **(RQ3)** Finance.

- **(RQ3a)** How does the available information about finance (e.g. relating to fees, loans, bursaries, accommodation rates etc.) influence the choices students make?
- **(RQ3b)** What is the impact of the funding system on choice in other developed countries? [Wales, USA, Scotland, Northern Ireland, Scandinavian countries.]

4. **(RQ4)** Mature students.

- **(RQ4a)** Which factors shape mature students’ choices?
- **(RQ4b)** In which ways do these factors impact on mature students in the following groups:
  i. Those from disadvantaged backgrounds
  ii. Those seeking to retrain
  iii. Those who previously pursued an FE or level 4/5 route and go back to HE?

The report is structured around these research questions.

1.2. **Background**

The post-16 education and training landscape has changed radically. For 16-18 years olds, the school leaving age has risen to 18, there has been a change in the number and range of providers, and an increased emphasis on apprenticeships as a mechanism for meeting the vocational; aspirations of young people and the labour market needs of employers. The introduction of T-Level qualifications over the coming years will also provide additional options. For 19-24 year olds the main route continues to be HE, despite the financial costs for students being increased. Advanced and degree level apprenticeships have created progression pathways for young people to higher level qualifications and skills outside of the HE academic route. The main growth in apprenticeship take up has occurred amongst adults, but there has been a sharp decline in adult part-time HE take-up, and in post 19+ government-funded FE. Employer investment in skills training has also been declining since the financial crisis. In addition to the growth in adult apprentices, the National Retraining Programme is also being developed, as well as a successor to the European Social Fund (ESF) which traditionally supports disadvantaged learners.

Alongside these radical changes in the topography and funding of education and training, there has also been a deterioration in the amount and quality of Government funded information, advice and guidance (IAG) available to young people and adults since the
start of the decade. In response to criticism from the Education Select Committee\(^1\) and Ofsted\(^2\) (amongst others) DfE published its Careers Strategy in December 2017\(^3\). This strategy recognised the variable quality in careers IAG available through England, especially for young people at the key transition points. It pledged that every young person will have “…a careers programme based around your needs”; and for adults: “…access [to] local, high-quality advice from a National Careers Service adviser, with more bespoke advice and support available when you need it most”\(^4\).

For over a decade there has been an intention to make education and training more demand-led. A key element of the Post-16 Skills Plan is empowering people – young people, adults and their formal and informal advisers – to access IAG in order to make more informed decisions. As we have seen, the education and training landscape is becoming more complex which requires effective careers IAG so that choices are well informed. The Industrial Strategy identified the issues for young people:

“People choosing apprenticeships or courses in colleges currently face significant complexity when selecting and applying for a course… We will therefore explore how to give technical education students clear information and better support throughout the application process, with a similar platform to UCAS, which will also make it easier for students to compare options in technical education and higher education”\(^5\).

For adults too, there is significant evidence that the provision of high quality, impartial careers information and guidance is key to supporting choices and transitions into education, training and employment (see for example Hooley et al., 2012\(^6\)). It also has a crucial role to play in encouraging and supporting those disengaged or disadvantaged to engage in education and learning activities.

**Post-16 education and training**

Table 1 provides a context to the report, describing the education and training of 16-18 year olds since the start of the decade. There have been significant falls in the number of 16, 17 and 18 year olds who are Not in Education, Employment or Training (NEET). Whilst there have been slight falls in the number of young people entering full-time education (apart from 17 year olds), this has been more than offset by large rises in young people entering work based learning (which in most cases will be

---


\(^2\) Ofsted (2013), Going in the right direction? Careers guidance in schools from September 2012. See also Ofsted’s Chief Inspectors evidence to the Education Committee 16 September 2015.

\(^3\) Department for Education (December 2017), Careers strategy: making the most of everyone’s skills and talents

\(^4\) Ibid.


apprenticeships), particularly for 17 and 18 year olds. For these two age groups there have also been large increases in the numbers entering Employer Funded Training.

Table 1  Profile of 16-18 education and training in England 2010-2016

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Full-time education</td>
<td>556,000</td>
<td>538,500</td>
<td>540,400</td>
<td>556,900</td>
<td>556,400</td>
<td>549,000</td>
<td>537,000</td>
<td>-3%</td>
</tr>
<tr>
<td>Work Based Learning</td>
<td>23,200</td>
<td>23,100</td>
<td>20,700</td>
<td>21,300</td>
<td>22,400</td>
<td>24,200</td>
<td>24,100</td>
<td>4%</td>
</tr>
<tr>
<td>Employer Funded Training</td>
<td>10,200</td>
<td>10,800</td>
<td>10,300</td>
<td>8,300</td>
<td>11,200</td>
<td>11,200</td>
<td>10,100</td>
<td>-1%</td>
</tr>
<tr>
<td>Other Education and Training</td>
<td>27,900</td>
<td>32,500</td>
<td>31,200</td>
<td>32,800</td>
<td>21,500</td>
<td>22,500</td>
<td>20,700</td>
<td>-26%</td>
</tr>
<tr>
<td>Not in any education or training - in employment</td>
<td>9,200</td>
<td>6,900</td>
<td>6,900</td>
<td>2,800</td>
<td>2,600</td>
<td>3,600</td>
<td>4,400</td>
<td>-52%</td>
</tr>
<tr>
<td>Not in any education, employment or training (NEET)</td>
<td>33,600</td>
<td>35,000</td>
<td>37,800</td>
<td>26,400</td>
<td>23,000</td>
<td>20,000</td>
<td>17,700</td>
<td>-47%</td>
</tr>
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</table>

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</tr>
</thead>
<tbody>
<tr>
<td>Full-time education</td>
<td>488,800</td>
<td>485,300</td>
<td>484,800</td>
<td>481,800</td>
<td>500,200</td>
<td>493,300</td>
<td>491,400</td>
<td>1%</td>
</tr>
<tr>
<td>Work Based Learning</td>
<td>40,100</td>
<td>39,900</td>
<td>39,000</td>
<td>39,900</td>
<td>43,500</td>
<td>45,500</td>
<td>47,500</td>
<td>18%</td>
</tr>
<tr>
<td>Employer Funded Training</td>
<td>19,900</td>
<td>20,700</td>
<td>19,200</td>
<td>21,100</td>
<td>21,800</td>
<td>23,500</td>
<td>22,500</td>
<td>13%</td>
</tr>
<tr>
<td>Other Education and Training</td>
<td>32,800</td>
<td>38,900</td>
<td>35,600</td>
<td>38,300</td>
<td>27,000</td>
<td>25,000</td>
<td>22,600</td>
<td>-31%</td>
</tr>
<tr>
<td>Not in any education or training - in employment</td>
<td>27,500</td>
<td>24,500</td>
<td>25,800</td>
<td>29,600</td>
<td>24,800</td>
<td>23,200</td>
<td>18,200</td>
<td>-34%</td>
</tr>
<tr>
<td>Not in any education, employment or training (NEET)</td>
<td>54,100</td>
<td>55,900</td>
<td>46,200</td>
<td>40,800</td>
<td>37,200</td>
<td>31,700</td>
<td>33,000</td>
<td>-39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time education</td>
<td>334,300</td>
<td>338,500</td>
<td>324,300</td>
<td>327,600</td>
<td>329,600</td>
<td>333,400</td>
<td>332,600</td>
<td>-2%</td>
</tr>
<tr>
<td>Work Based Learning</td>
<td>48,100</td>
<td>47,200</td>
<td>51,600</td>
<td>53,800</td>
<td>55,900</td>
<td>59,400</td>
<td>60,200</td>
<td>25%</td>
</tr>
<tr>
<td>Employer Funded Training</td>
<td>37,300</td>
<td>36,900</td>
<td>45,000</td>
<td>45,500</td>
<td>50,300</td>
<td>50,400</td>
<td>51,700</td>
<td>39%</td>
</tr>
<tr>
<td>Other Education and Training</td>
<td>39,200</td>
<td>42,300</td>
<td>44,000</td>
<td>42,800</td>
<td>36,600</td>
<td>37,900</td>
<td>34,800</td>
<td>-11%</td>
</tr>
<tr>
<td>Not in any education or training - in employment</td>
<td>135,200</td>
<td>103,200</td>
<td>108,500</td>
<td>102,500</td>
<td>99,100</td>
<td>106,000</td>
<td>111,700</td>
<td>-17%</td>
</tr>
<tr>
<td>Not in any education, employment or training (NEET)</td>
<td>95,000</td>
<td>102,100</td>
<td>97,400</td>
<td>84,100</td>
<td>88,100</td>
<td>74,400</td>
<td>63,500</td>
<td>-33%</td>
</tr>
</tbody>
</table>

Source: National Statistics, SFR various numbers Participation in education, training and employment

Table 2 shows the number and profile of adults (19+) in Government funded education and training. Since 2010/11 there has been a decline of 27% in the number of adults participating in post-19 education and training, including Community Learning and
English and Maths (18% and 16% respectively). However, there has been a substantial increase in the number of adult apprentices (35%).

Table 2  Profile of 19+ FE education and training in England 2010/11-2015/16

<table>
<thead>
<tr>
<th>Adults (19+)</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>% change 10/11-15/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>All education and training</td>
<td>3,163,200</td>
<td>3,149,700</td>
<td>3,280,600</td>
<td>2,929,600</td>
<td>2,613,700</td>
<td>2,324,700</td>
<td>-27%</td>
</tr>
<tr>
<td>All apprenticeships</td>
<td>665,900</td>
<td>806,500</td>
<td>868,700</td>
<td>851,500</td>
<td>871,800</td>
<td>899,400</td>
<td>35%</td>
</tr>
<tr>
<td>Education and training</td>
<td>1,213,400</td>
<td>1,518,000</td>
<td>1,782,200</td>
<td>1,603,700</td>
<td>1,355,000</td>
<td>1,098,500</td>
<td>-9%</td>
</tr>
<tr>
<td>English and Maths</td>
<td>961,800</td>
<td>1,083,000</td>
<td>1,049,600</td>
<td>951,800</td>
<td>905,600</td>
<td>803,800</td>
<td>-16%</td>
</tr>
<tr>
<td>Community Learning</td>
<td>699,400</td>
<td>683,300</td>
<td>684,700</td>
<td>657,200</td>
<td>609,700</td>
<td>570,600</td>
<td>-18%</td>
</tr>
</tbody>
</table>

Source: National Statistics (2017), Further education and skills: October 2017

Table 3 shows the number of students participating in HE by the level of study and mode of participation. Between 2012/13 and 2016/17 the total number of students fell slightly by 1%. However, this masks a big change between different levels of qualification and mode of study. The number of part-time students fell significantly by 23%, and for each level of study, especially ‘other’ undergraduates (i.e. non-degree undergraduates). There was, however, significant increases in the number of full-time undergraduates. And these are the largest groups of learners, this has offset the fall in the number of FTE (full-time equivalent) students. The numbers on full-time other undergraduate courses fell by 45%.

Table 3  Profile of HE participation in England 2012/13-2016/17 by mode of study

<table>
<thead>
<tr>
<th></th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
<th>2016/17</th>
<th>% change 12/13-16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time postgraduate</td>
<td>244,055</td>
<td>250,555</td>
<td>251,680</td>
<td>252,105</td>
<td>266,510</td>
<td>9%</td>
</tr>
<tr>
<td>Full-time undergraduate</td>
<td>1,075,860</td>
<td>1,095,175</td>
<td>1,099,325</td>
<td>1,143,385</td>
<td>1,180,640</td>
<td>10%</td>
</tr>
<tr>
<td>Full-time other undergraduate</td>
<td>64,415</td>
<td>47,745</td>
<td>40,970</td>
<td>36,245</td>
<td>35,730</td>
<td>-45%</td>
</tr>
<tr>
<td>Full-time total</td>
<td>1,384,330</td>
<td>1,393,475</td>
<td>1,391,975</td>
<td>1,431,735</td>
<td>1,482,880</td>
<td>7%</td>
</tr>
<tr>
<td>Part-time postgraduate</td>
<td>199,975</td>
<td>194,010</td>
<td>190,905</td>
<td>188,280</td>
<td>190,960</td>
<td>-5%</td>
</tr>
<tr>
<td>Part-time undergraduate</td>
<td>182,720</td>
<td>166,945</td>
<td>152,050</td>
<td>143,255</td>
<td>135,100</td>
<td>-26%</td>
</tr>
<tr>
<td>Part-time other undergraduate</td>
<td>148,825</td>
<td>120,595</td>
<td>109,165</td>
<td>98,075</td>
<td>83,040</td>
<td>-44%</td>
</tr>
<tr>
<td>Part-time total</td>
<td>531,520</td>
<td>481,550</td>
<td>452,120</td>
<td>429,610</td>
<td>409,100</td>
<td>-23%</td>
</tr>
<tr>
<td>All students</td>
<td>1,915,850</td>
<td>1,875,025</td>
<td>1,844,095</td>
<td>1,861,345</td>
<td>1,891,980</td>
<td>-1%</td>
</tr>
</tbody>
</table>

Source: HESA (2018), Who’s studying in HE?

As gas been discussed, these overall numbers hide fundamental and significant changes in the type, level and mode of study, and with further reforms on the horizon and current reforms settling in, further changes are likely.
2. Methodology

The approach used in this study was a rapid evidence assessment (REA). This is a structured and rigorous search of published evidence, though it is not as extensive or formalised as a systematic review. The REA was primarily based on a focused review of relevant academic, peer-reviewed journal articles and a review of relevant ‘grey’ literature published on websites of relevant national and international organisations.

2.1. Focused literature review of academic articles

2.1.1. Search summary

The focus literature search was undertaken across the following databases: EBSCOhost, Emerald, ProQuest and Web of Science. The search process was in iterative exploratory process the main components of which were:

- The primary search terms were choice OR decision with secondary search terms around education (further, higher, vocational and appren*), and using search terms for the UK and its composite countries, rather than using geographic limiters for the UK and its constituent parts.

- Combining the above search terms still accumulated a large number 12,000+, however, it was clear that many of these were in the field of health.

- The next step in the process was to use subject area and journal name to target education choice and decision making. This approach excluded all health and medical subject areas and journals, but included those in the fields of behavioural science, economics, education, psychology and sociology.

- A review of publication titles further reduced the total.

- Originally the timeframe for inclusion was the past fifteen years i.e. 2003 to the present day. However, given the abundance of references this was shortened to 2005 onwards. In addition, articles and reports focusing on specific aspects of earlier education policy were omitted e.g. evaluation of Education Action Zones.

As a result of these new searches, 398 titles (or a brief look at the abstract) were reviewed.

Once all duplicates were removed, the total number of abstracts saved for review from all searches (across the four databases) was 184.

2.1.2. Abstract review stage

Table 1 shows the number of abstracts that were reviewed against the inclusion criteria and the initial groups they were assigned to.
Table 4  Abstract review (N = 156) and Grouping of those saved (N = 98)

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of abstracts reviewed</th>
<th>Number IDed for full article review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choice between FE, HE and apprenticeships</td>
<td>398</td>
<td>57</td>
</tr>
<tr>
<td>Choice within FE, HE and apprenticeships</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Mature students</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>143</td>
</tr>
</tbody>
</table>

The references have been grouped according to their appropriateness to the four main research questions. References have not been duplicated between the four groups. Given the close approximation of the research questions, a number of sources will cover more than one questions. Therefore, the number of references for each research question will be a minimum of relevant material.

2.1.3. Emergent findings from Abstract review stage

A brief summary is given of emergent findings for each of the groups listed as ‘closest in relevance’ in Table 1, followed by the references to the full articles.

Issues at the Abstract review stage were:

- There was a disproportionate focus on HE as opposed to FE and apprenticeships. Few sources focus on apprenticeships specifically.
- The review has not focused specifically on the post-18 age group. In part this is due to the decision making process beginning earlier, as well as few articles (apart from HE) focusing on this age group (apart from those that specifically consider mature learners).
- However, the main reason is that authors (from a brief review of the abstracts and experience of research in this area) that decision making and the choice framework are subject to generic influences and parameters. For example, the role of cognitive biases in the behavioural literature, and agency in the sociological literature.

Choice between FE, HE and apprenticeships

- The publications come from a wide range of publications covering behavioural science, careers counselling, economics, psychology, sociology and other subject areas (e.g. urban studies).
As mentioned above, many sources focus on the 14-19 age range and the determinants of choice and the decision making process of young people.

**Choice within FE, HE and apprenticeships**

- Most references relate to choices between different HE institutions.
- A number focus on the gender difference of different occupational (and therefore VET) choices.
- A small number focus on choice of particular subjects (mostly STEM).

**Finance**

- Most references focus on the financial decision, as opposed to the use of information about that decision.
- There are a small number of sources looking at financial choices and decision making in other countries. This is a significant area of research and more guidance will be needed on what aspects of this area need to focus on e.g. focusing on two countries.

**Mature students**

- This group has the fewest number of references.
- However, a number of the references in other groups will be relevant here as they relate to the generic underpinnings of decision making and choice e.g. social capital and rational choice.

### 2.2. Grey literature review

Grey literature consists of materials and research produced by organizations outside of the normal commercial or academic publishing and distribution channels. Common grey literature publication types include reports (annual, research, technical, project, etc.), working papers, government documents, white papers and evaluations. They are not peer reviewed.

The grey literature review covered **82 websites** identified as relevant (through the researchers’ experience) to the main research questions. This covered the websites of international organisations (such as the ILO and UNESCO), European and UK governmental organisations (e.g. Cedefop and the Department for Education), other governmental organisations (for example, Ofsted), as well as research institutions and third sector organisations (TSOs). A full list of websites visited is contained in Section 8.

Initially, the research and/or publications page (or similar) of relevant sites was reviewed to identify any literature relevant to the study. In addition, a site search was undertaken using the following search terms separately: choice*; decision*; further, higher, vocational
and appren*. Finally, a Google search was undertaken using the search terms of the focused review.

43 websites generated literature of broad relevance to the study, and a total of 85 documents were identified.
3. (RQ1) Choices between Higher Education (HE), Further Education (FE) and Apprenticeships.

3.1. Introduction

This section focuses on how individuals make choices between the academic, technical and vocational routes after the age of 18 (i.e. Year 13).

Individuals’ choices about learning and skills options are not separate or distinct from other decision-making processes. The literature on decision-making can be combined into four broad camps that which: focuses on the inherent characteristics, neurological and genetic, of individuals which manifests itself in behaviour (psychology); centres on the influence of socio-environmental factors that determines an individual’s practices (sociology); treats decisions as a calculation based on a breadth of information that determines the rate of return to the person (rational choice); and those which combine two or more of these approaches.

Over the past decade the post-16 options of young people have been radically transformed. The individual’s funding for HE is now completely through student loans with no Government support, and now includes tuition fees. There has also been a significant rise in the emphasis on, and numbers taking, apprenticeships (including at Level 5 and above), although this has mostly been taken up by adults. Recent reforms are introducing Technical Level qualifications at Level 3 for 16-18 year olds, and a National Retraining Programme is being developed for adults.

This is at a time when careers information, advice and guidance (IAG) for young people has been cut, with the responsibility for IAG for young people given to schools but with little additional funding. The recent Careers Strategy\(^7\) is to support schools, colleges and employers to adopt the Gatsby Foundation’s careers benchmarks, though it is unclear whether this will receive additional Government funding\(^8\).

In contrast to the absence of consistent high quality careers IAG young people over the past ten years, there has grown a myriad of alternative information sources, mostly on the internet. However, rather than providing a basis for more informed decision making, this is seen as adding to confusion in making informed choices by young people. In the past, independent careers advisors were available to support young people in their decisions. But the abolition of the Connexions Service meant that the main source of independent advice was removed. Now, apart from family and friends, most of the advice young people can draw on is provided via organisations that have a pecuniary interest in the outcome of their decisions.

\(^7\) Department for Education (December 2017), Careers strategy: making the most of everyone’s skills and talents

\(^8\) J. Holman (2014) Good Career Guidance. Gatsby Charitable Foundation
3.1.1. Overview of the decision making pathway of young people

Research found that most young people consciously make their post-16 and post-18 choices in Year 9 (when choosing their GCSE options), at Year 11 (the transition point into post-16 education and training), and in their Year 12 (for those in HE). The study found that the length of the decision making process varied for those choosing different routes. Young people on academic pathways first started to think about their post-16 choices earlier than those on technical courses: 8% of participants in HE (Academic) reported that they first considered their future education choices in Years 7 or 8, only 2% of HE (Technical) learners did so.

Table 5 When young people first started thinking about what to do after Year 11/13*

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In primary school</td>
<td>7%</td>
</tr>
<tr>
<td>In Year 7 or 8</td>
<td>8%</td>
</tr>
<tr>
<td>When I had to decide on my GCSE options in Year 9</td>
<td>21%</td>
</tr>
<tr>
<td>During Year 10</td>
<td>16%</td>
</tr>
<tr>
<td>During Year 11</td>
<td>31%</td>
</tr>
<tr>
<td>During Year 12*</td>
<td>22%</td>
</tr>
<tr>
<td>During Year 13*</td>
<td>10%</td>
</tr>
<tr>
<td>I'm not sure</td>
<td>7%</td>
</tr>
</tbody>
</table>

Base=2,017 (For options with an * the base=620)

Source: CFE Research (December 2017)

Young people on academic routes were clearer about their decision making pathway: only 7% of FE (Academic) learners were unsure when they made their final decision about what to study after Year 11, compared to one fifth (21%) of those on FE (Technical) routes. For young people making post-18 choices: one third (33%) of those on HE (Academic) routes made their final decision during Year 12 and just under half (47%) made it during Year 13. This compares to 19% and 63% respectively for HE (Technical) learners on higher level apprenticeships.

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9 CFE Research with D. Hughes (December 2017), User insight research into post-16 choices. Department for Education
Table 6  When young people made the final decision to do the course they are doing now\textsuperscript{10}  

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Year 7 or 8</td>
<td>1%</td>
</tr>
<tr>
<td>When I had to decide on my GCSE options in Year 9</td>
<td>5%</td>
</tr>
<tr>
<td>During Year 10</td>
<td>6%</td>
</tr>
<tr>
<td>During Year 11</td>
<td>51%</td>
</tr>
<tr>
<td>During Year 12\textsuperscript{*}</td>
<td>31%</td>
</tr>
<tr>
<td>During Year 13\textsuperscript{*}</td>
<td>50%</td>
</tr>
<tr>
<td>I'm not sure</td>
<td>12%</td>
</tr>
</tbody>
</table>

Base=2,017 (For options with an * the base=620)

Source: CFE Research (December 2017)

Both this study and the Careers and Enterprise Company’s Moments of Choice provides a summary of the decision making process for young people (see Table 7)\textsuperscript{11,12}. For many young people, their choices are developed before 16 years old, and for many these choices are maintained. That choice may be a particular career or a desire simply to go to university. But it appears that for many young people it is a stable trajectory.

In making the decision about their current course most young people knew precisely what they were going to do. Over half of young people on each of the three options (Technical, HE Academic and FE Academic) agreed or strongly agreed with the statement ‘I always knew what I was going to do so I didn’t consider any other options’ (see Figure 13).

Therefore it appears that for most students, their routes once chosen, tend to be more certain than not suggesting an evolution of aspiration underpinning their decisions.

\textsuperscript{10} CFE Research (December 2017) op. cit.
\textsuperscript{11} Ibid.
\textsuperscript{12} Careers and Enterprise Company (2016), Moments of Choice: How education outcomes data can support better informed career decisions
Table 7: Timeline of decision making

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Decision making process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-14 years old</td>
<td>Even by Year 9 (up to 13 years old), young people were already engaging with ideas about their chosen career path. At this point, participants recalled that motivations and aspirations associated with education and careers took the form of expressing enjoyment or an aspiration to explore an area of particular interest in more detail.</td>
</tr>
<tr>
<td>At School (14+ and 16+ choices)</td>
<td>At school, and when making choices about their 14+ and 16+ options, participants had moved from concepts of interest and enjoyment into potential educational and career opportunities. The majority reported making key decisions at age 16. Those individuals with strong career aspirations and self-motivation (early deciders) reported the signposting to higher education easy to understand compared to FE and apprenticeship options. For the majority of respondents, finance and transport issues came into sharp focus at this stage.</td>
</tr>
<tr>
<td>Sixth Form or FEC</td>
<td>By this stage, the majority of young people had formulated general or, in some cases, very specific views about their plans for when they left formal education. This does not necessarily mean that an individual will follow this pathway, but it is the point where key decisions about whether to participate in higher education or to follow other options such as apprenticeships became more apparent.</td>
</tr>
<tr>
<td>Final year of College or Sixth form</td>
<td>Employability and financial security often came into sharp focus for young people at this stage when a final choice about next stage plans needed to be made. Those who might be considered more ‘risk averse’ or without a specific career plan in mind were most likely to either drift into continued education (drifters) or change route (switchers) at this point with a view to moving into a new programme of study and/or employment. In some cases, respondents remained unclear about their future career pathways (the undecided).</td>
</tr>
</tbody>
</table>

Source: CFE Research (2017); Careers and Enterprise Company (2016)
Research undertaken by the Sutton Trust\textsuperscript{13} found that post-18 choices had been made at a much earlier age by young people. When asked how likely or unlikely they were to go into HE, only one in ten (11\%) said they were not sure. This is almost half of those 11-16 year old school pupils responding before the financial crisis in 2008.

Source: Ipsos MORI Young People Omnibus Survey 2017

In terms of the broad categories of pathways, analysis of the Longitudinal Study of Young People in England (LSYPE) found that there were six distinct clusters of post-16 activities\textsuperscript{14}. In most there are substantial blocks of one activity related to the main transition points – education, employment, apprenticeships and NEET. There is little cycling between these different broad types of activity, especially after Year 13. This suggests that the 16-18 year old transition point is critical for longer term outcomes in a young person’s life. HE is the choice for just under half of young people (45\%), followed by early work (21\%), and then employment after some FE (15\%). As far as young people who are NEET are concerned most stay NEET, whether they become NEET at Year 11 or 13. On the evidence, the raising of the school leaving age looks as though it will only delay matters as far as this group of young people is concerned.

\textsuperscript{13} Ipsos MORI (2017), Young People Omnibus Survey 2017. Sutton Trust
3.2. (RQ1ai) How do students choose between HE, FE and apprenticeship routes

Different disciplines have varying views of the decision making process and information used. There are a wide array of decision making models from a variety of disciplines which stress various primary elements in influencing individual choice. These include: expected utility, the role of information, values, beliefs, attitudes, norms, identity, agency, efficacy, control, habit, routine, and several more\(^\text{15}\).

The following is a simplistic and brief overview of some of these models, which have been highlighted in the literature focusing on learning and skills choices. These different approaches tend to stress varying elements and stages in the decision making process. Some emphasise the characteristics of the individual whilst others highlight the provider and provision, and the messenger and the message. Different theorists address longer term factors leading up to the decision, alternatively others tend to focus on the decision itself.

\(^{15}\) Andrew Darnton (July 2008), Reference Report: An overview of behaviour change models and their uses. GSR
3.2.1. Rational choice

Rational choice approaches to decision making were developed in microeconomics to understand and model how consumers make their choices. Although there are different variants, most assume that individuals carefully weigh up the costs and benefits of the outcomes of decision, and make a choice based on maximising the latter and minimising the former. In making the decision individual’s collect sufficient information to make an optimal decision of the various options’ expected utility (benefits over costs).\(^{16}\)

As far as choices between different learning and skills options, individuals will weigh up the benefits (usually financial such as future pay) against the costs (loss earnings whilst studying, maintenance costs etc.). People will then choose the option which has the greatest return of benefits to the costs.

Rational choice is based on a number of assumptions which can be criticised for being unrealistic. However, the main criticism is that it does not predict individual choices very well\(^{17}\). That choices are often highly situational and/or context dependent\(^{18}\). In addition, in reality many choices are not even considered.

Rational choice theory is often set up as an Aunt Sally by rival theorists. But rational choice approaches still have value. The power of rational choice is seen as lying in its simplified assumptions which allow for the ex ante evaluation of public policy options: “Many of the “objectionable” simplifying features of the rational choice model combine to make such an analysis feasible. By taking preferences over economic outcomes as the starting point, the approach abstracts from the idea that preferences might be influenced by contextual details, by the policies themselves, or by the political process. Moreover, rational choice approaches to policy evaluation typically assume people will act in a way that maximizes these preferences – this is the justification for leaving choices in the hands of individuals whenever possible. Often, it is precisely these simplifications – that preferences are fundamental, focused on outcomes, and not too easily influenced by one’s environment and that people are generally to reason through choices and act according to their preferences – that allow economic analysis to yield sharp answers to a broad range of interesting public policy questions.\(^{19}\)

3.2.2. Psychological approaches

Psychology is the primary discipline for exploring human motivation and its origins; as such it is the mainstay of understanding behaviour. It can explain complex behaviour in

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\(^{16}\) A. Samson (2014), Behavioral Economics Guide 2014  
\(^{17}\) A. Diamond et al (201), Behavioural Approaches to Understanding Student Choice. NUS and HEA  
\(^{18}\) J. Levin and P. Milgrom (September 2004), Introduction to Choice Theory  
\(^{19}\) Ibid.
simple terms, can be easily measured (e.g. survey of attitudes) and has good explanatory power\textsuperscript{20}.

Traindis’ Theory of Interpersonal Behaviour (TIB) is provided as an example. It is an ‘expectancy value model’ which emphasises the role of attitudes in determining behavioural intentions. Attitudes are, in turn, the product of one’s beliefs about behavioural outcomes and one’s evaluation of those outcomes. Factors other than attitudes are taken into account. TIB is classified as an ‘adjusted expectancy value’ model, the key addition being habit.

\textbf{Figure 2}  Triandis’ Theory of Interpersonal Behaviour (TIB)\textsuperscript{21}

\begin{center}
\begin{tikzpicture}
% Diagram code here
\end{tikzpicture}
\end{center}

\textit{Source: A. Darnton, 2008}

According to Triandis, the top three factors making a choice as: i) habit ii) intention, and iii) facilitating conditions. In addition, as experience of a behaviour is acquired, the influence of habit increases, and that of intention declines. This makes behaviour over time more routine and automatic.

\textsuperscript{20} P. Dickinson et. al. (March 2011), Individuals’ Learning Choices: A Review Of Literature And Behavioural Change Approaches. BIS

\textsuperscript{21}
This approach balances both intrinsic motivation and extrinsic factors. For young people, ‘habits’ regarding future options are less well formed and likely to be malleable. However, this approach suggests that improving outlook and decisions may involve intensive work to address negative norms and views of particular options.

### 3.2.3. Sociological approaches

Sociology presents a different understanding of human conduct. Sociology talks of ‘practice’ instead of ‘behaviour’. Behaviour is individual, the product of an individuals’ motivations and capabilities, expressed through interaction in social groups and the wider world. Practices, in contrast, are relatively stable entities. They do not result from an individual’s intrinsic characteristics but through the ongoing interaction between agency (mediated by lifestyle) on the one hand, and structure (as rules and resources) on the other.\(^{22}\)

Numerous studies consistently demonstrate the relation between education performance, choices and outcomes to socioeconomic group, ethnicity and gender. For Bourdieu, a young person’s expectations and performance are closely tied to their economic, social and cultural capital. Aspirations, expectations, choices and outcomes are all a product of socialization processes, conditioned by a person’s background be that class, gender, ethnicity, etc.\(^{23}\) According to these theories significant others – parents, peers, teachers – significantly affect educational expectations and performance. Status and support combine to determine the ‘practices’ of individuals.

For Shove, people are locked into these practices through their constructs and how these are successfully or unsuccessfully applied in social interactions. Practice is the product of three elements:

- **Materials**: such as teachers, location and content;
- **Competencies and procedures**: including an individual’s skills, qualification frameworks, finance; and
- **Images**: conception of learning (e.g. as a necessity or discovery); the outcomes of learning leading to careers and pay etc.

Each element can contain intrinsic and extrinsic factors, and includes institutional factors as well as narratives. The elements interplay and can evolve over time. As an example, Shove provided the illustration of taking a shower. ‘Materials’ would be the showering equipment; ‘competences’ the know-how to make the shower work, and to fit into ones daily routine; and ‘images’ the ideas of getting fresh daily as ‘correct and acceptable’.

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\(^{22}\) P. Dickinson et. al. (March 2011)

Practice-based analysis regards ‘behaviour’ as habitual or routine to a greater or lesser extent.

The focus of this model is the practice rather than the individual. The emphasis is on the practice to change rather than changing the individual. It is also circular, rather than linear, and whilst the components may be in place, the practice may not ensue. The elements making up each practices will be different based on whether it is an apprenticeship, other employment, FE or HE, and will vary depending on the individual. It suggests personalised approaches are required of how the practice is presented to the individual.

Figure 3 Shove’s Practice Theory Model\textsuperscript{24}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{shoves-practice-theory-model.png}
\end{figure}

\textbf{3.2.4. Behavioural economics}

For both psychological and sociological approaches, the position of the individual is essentially fixed when making a decision. Their characteristics, past life situation and social relationships essentially mean that choices are heavily restricted at the decision point. Where the individual is on their life, and how they got there, pre-determine the decision. This necessarily limits the amount of free will we have to exercise, and makes virtually meaningless and irrelevant the quality and quantity of information in which a decision is based. In contrast, rational choice does include free will, and that the amount and type of information is highly relevant to the decision making process.

The interjection of behavioural economics into the rational decision making discipline is to add a touch of realism. It introduces psychological and sociological elements into

\textsuperscript{24} P. Dickinson et. al. (March 2011)
microeconomic decision making theories. It believes that: “…our thinking is subject to insufficient knowledge, feedback, and processing capability, which often involves uncertainty and is affected by the context in which we make decisions. Most of our choices are not the result of careful deliberation. We are influenced by readily available information in memory, automatically generated affect, and salient information in the environment. We also live in the moment, in that we tend to resist change, are poor predictors of future behaviour, subject to distorted memory, and affected by physiological and emotional states. Finally, we are social animals with social preferences, such as those expressed in trust, reciprocity and fairness; we are susceptible to social norms and a need for self-consistency”\textsuperscript{25}. Figure 4 summarises the range of cognitive biases, of which there are over 200.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{cognitive-bias.png}
\caption{Cognitive bias: a summary\textsuperscript{26}}
\end{figure}


As regards to decision making about education and skills it uses imperfect information, in limited timescales which does not allow for making accurate assessments about the outcomes. Emotion, identity and obligation feature strongly in the decision. ‘Rules of thumb’ (heuristics are used) to manage the complexity of the decision making process\textsuperscript{27}.

\\textsuperscript{25} A. Samson (2015) op cit
\textsuperscript{26} \url{https://en.wikipedia.org/wiki/List_of_cognitive_biases}
\textsuperscript{27} A. Diamond (2012) op cit.
From a UK policy perspective, these have been encapsulated in a simpler mnemonic MINDSPACE which encapsulates intrinsic, social and environmental factors.

Behavioural economics was attractive to policy makers after the financial crisis because it was seen as providing an effective but cheap method of persuading people to adopt ‘good’ choices regarding their health, pensions and other lifestyle decisions. One concrete example of MINDSPACE is in changing the choice architecture regarding pensions. Rather than the costly method of paying for advertising to encourage more people to save more for their pensions. The Government changed the decision. Rather than the decision to contract ‘in’, now the everyone is contracted in. The decision not is to contract ‘out’. This simple change now means that millions of people are now saving billions more for their pensions.

![Figure 5](image)

**MINDSPACE principles**

<table>
<thead>
<tr>
<th>M</th>
<th>IN</th>
<th>D</th>
<th>S</th>
<th>P</th>
<th>A</th>
<th>C</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messenger</td>
<td>We are heavily influenced by who communicates information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentives</td>
<td>When responding to incentives, we are loss averse and strongly discount the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norms</td>
<td>We tend to do what those around us are already doing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defaults</td>
<td>We ‘go with the flow’ of preset options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salience</td>
<td>Our attention is drawn to what is novel and seems relevant to us</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priming</td>
<td>Our acts are often influenced by sub-conscious cues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affect</td>
<td>Emotional associations can powerfully shape our actions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitments</td>
<td>We seek to be consistent with our public promises, and reciprocate acts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ego</td>
<td>We act in ways that make us feel better about ourselves</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Behavioural economics is not without its criticism. Attempts to influence young people to make ‘good’ choice options has failed. For example, attempts to ‘nudge’ people to apply to Russell Group universities using the messenger and norms elements of MINDSPACE. Neither of the three options changed pupils’ behaviour by any significant amount.

This example also shows that in most cases, people have to be ‘in the room’ i.e. within the decision making context, to make a decision.

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28 Institute for Government (2010), MINDSPACE: Influencing behaviour through public policy
29 M. Sanders et al (March 2017), Encouraging People into University: Research report. Behavioural Insights Team
3.2.5. **Socio-ecological approach**

Behavioural economics introduced (in the main) psychology into economic approaches to understanding decision making. Other combinations of approaches also exist.

The socio-ecological approach argues that to varying extents young people are able to steer the course of their lives despite constraining forces. It assumes there are multiple sources of influence on individual development, from the micro- to the macro. For example, one study found that there was no significant difference in self-efficacy between those in higher education and those experiencing long-term NEET. The latter may have high competence beliefs because they are delusional\(^{30}\). This study found that agency indicators in the LSYPE were predicted outcomes independent of structural constraints such as SEG, area of residence, gender and ethnicity. The authors concluded that: “Given the constraining forces in their immediate and wider social context, young people can to some extent actively steer the course of their lives. The study highlights the importance of conceptualising the role of the agent for a better understanding of diversity in youth transitions, rather than solely focusing on structures and socioeconomic resources. Moreover, there are interactive as well as domain-specific effects suggesting that young people select a specific pathway or niche that can offer them developmentally appropriate challenges through which they can experience competence and which enables them to feel satisfied about their lives”.

According to the socio-ecological approach there is an iterative interplay of a variety of factors within available opportunities. Within this context young people choose a pathway that fits with their preferences and which they see as achievable.

3.3. **(RQ1bi) What are the most important factors when students choose between different routes?**

If we accept that young people make decisions in the moment, as opposed to having their choices made for them psychologically, structurally or behaviourally. What or who influences their decisions?

Various authors have identified a wide range of individuals, organisations and other factors which influence young people’s choices.

\(^{30}\) I. Schoon (2017)
<table>
<thead>
<tr>
<th>GCSE attainment age 15</th>
<th>Level achieved age 23</th>
<th>Median earnings age 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>29% Bottom third GCSE attainment</td>
<td>33% Below level 2</td>
<td>£15,800</td>
</tr>
<tr>
<td></td>
<td>40% Level 2</td>
<td>£16,800</td>
</tr>
<tr>
<td></td>
<td>21% Level 3</td>
<td>£16,900</td>
</tr>
<tr>
<td></td>
<td>4% Below level 2</td>
<td>£18,800</td>
</tr>
<tr>
<td></td>
<td>26% Level 2</td>
<td>£19,000</td>
</tr>
<tr>
<td>35% Middle third GCSE attainment</td>
<td>42% Level 3</td>
<td>£19,500</td>
</tr>
<tr>
<td></td>
<td>6% Level 4/5</td>
<td>£21,000</td>
</tr>
<tr>
<td></td>
<td>20% Level 6</td>
<td>£22,300</td>
</tr>
<tr>
<td></td>
<td>4% Level 2</td>
<td>£20,700</td>
</tr>
<tr>
<td></td>
<td>21% Level 3</td>
<td>£22,100</td>
</tr>
<tr>
<td></td>
<td>5% Level 4/5</td>
<td>£24,200</td>
</tr>
<tr>
<td>39% Top third GCSE attainment</td>
<td>61% Level 6</td>
<td>£27,000</td>
</tr>
<tr>
<td></td>
<td>10% Level 7+</td>
<td>£28,000</td>
</tr>
</tbody>
</table>

Source: Longitudinal Education Outcomes Study.
1. Age is based on academic age, which is age at the start of the academic year, 31 August.
2. This chart includes the 410,800 individuals in the cohort who were in sustained employment in the 2016-17 tax year.
3. GCSE attainment group splits the cohort into thirds based on GCSE point scores assigned to grades. The bottom third have a point score below 272, the middle third have a point score of between 272 and 546 and the top third have a point score of 560 or higher.

31 Department for Education (May 2018), Post-16 education: highest level of achievement by age 25 England
3.3.1. Future financial returns

Many studies highlight the importance of future wages and salaries as being an important determinant of post-18 choices. Figure 6 shows that the median earnings of 26 year olds rises with highest level of qualification. This holds true for each of the three categories of GCSE attainment. The increase in earnings to Level 6 (degree equivalent) from Level 3, and Levels 4/5 is greatest for those with the highest top third of GCSE attainment. Their earnings premium for those in the top third GCSE attainment with a Level 6 qualification, is also much higher than those in the middle third of GCSE attainment.

Thus as far as earning returns are concerned, it makes sense for people to achieve a higher level of qualification at all attainment levels. But the greatest absolute and relative returns are for those in the highest GCSEs attainment group with a Level 6 qualification. The incentives for other learners of gaining an additional qualification are much less.

Whilst the earnings returns may be lower for other groups of learners and qualifications all the recent studies in this review have reported earnings premiums.

In their analysis of the returns to apprenticeships, Cavaglia et al (2017) concluded:

“After controlling for factors including prior attainment, secondary school attended, demographics and experience, our results show a positive earnings differential from starting an apprenticeship in many contexts, though we cannot of course control for other factors such as social skills, motivation and other attributes valued by employers, so the earnings differential is not necessarily attributable wholly to apprenticeships.”

For men with a Level 2 apprenticeship, taking into account observable factors (such as prior attainment), at age 28 men earn 23% more than those who left school with only GCSEs and roughly 16% more than those who left education with a level 2 vocational qualification. For women, those who start an apprenticeship earn 15% more than those who left school with only GCSEs and about 4% more than those who left education with a level 2 vocational qualification.

At Level 3, the returns for men are much greater. Men who start an apprenticeship earn about 37% more than those who left education with A-levels (and did not progress any further), and 35% more than those who left education with a level 3 vocational qualification. For women they are not significantly different. Women Level 3 apprentices earn about 9% more than those who left education with A-levels by the time they are age 28. They earn roughly 15% more that those who left education with a level 3 vocational qualification.

32 Department for Education (May 2018), Post-16 education: highest level of achievement by age 25 England
Other studies also conclude that there are higher returns for both academic and vocational qualifications, although these vary by level and type of qualification.\textsuperscript{34} The rational choice model also involves the calculation of costs as well as benefits. In addition to loss of earnings whilst studying, some routes (especially HE) involves substantial financial investment. This has led some observers to believe that the financial costs of HE will outweigh the benefits leading to reduced participation, especially amongst those from lower SEGs.

At the time of the rise in tuition fees, NFER surveyed young people and found that the changes announced in 2012 did impact on factors affecting HE choice.\textsuperscript{35} Young people were one and a half times more likely to agree with the statement that they can be successful without qualifications. However, the announcement did not affect their attitudes to debt.

Table 8 and Table 9 shows what factors were most and least important for young people from different SEGs on whether to go to university. For all applicants, those from SEG AB, and from SEG C1-E, wanting to improve their job opportunities/salary prospects was the main influencing factor.\textsuperscript{36} Financial costs of HE – getting a loan, living costs and tuition costs – were amongst the least influential. Although they did rank higher for those in SEG C1-E than those in SEG AB.

Table 8 Factors of above average importance on whether to go to university by SEG – Index scores (MaxDiff method)

<table>
<thead>
<tr>
<th>Index scores from MaxDiff (100=average)</th>
<th>Applicants</th>
<th>Higher socio-economic applicants (SEG AB)</th>
<th>Lower socio-economic applicants (SEG C1-E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wish to improve my job opportunities/salary prospects</td>
<td>231</td>
<td>234</td>
<td>227</td>
</tr>
<tr>
<td>Wish to achieve the qualification</td>
<td>225</td>
<td>228</td>
<td>221</td>
</tr>
<tr>
<td>Wish to pursue my interest in a specific subject</td>
<td>222</td>
<td>226</td>
<td>217</td>
</tr>
<tr>
<td>Getting on to the course I want</td>
<td>215</td>
<td>219</td>
<td>208</td>
</tr>
<tr>
<td>Getting the university I want</td>
<td>174</td>
<td>183</td>
<td>162</td>
</tr>
<tr>
<td>Wish to experience a different way of life</td>
<td>119</td>
<td>123</td>
<td>112</td>
</tr>
</tbody>
</table>

Base: All English applicants (n=1,427)

\textsuperscript{34} For example, A. Bhutoria (September 2016), Economic Returns to Education in the United Kingdom: Foresight Report. Government Office for Science

\textsuperscript{35} T. Benton (February 2012), Do I really need a degree? The impact of tuition fee increases on young people’s attitudes towards the need for qualifications. NFER

\textsuperscript{36} S. Fagence and J. Hansom (March 2018), Influence of finance on higher education decision-making: Research report. Department for Education
Table 9  
Factors of below average importance on whether to go to university by SEG – Index scores (MaxDiff method)

<table>
<thead>
<tr>
<th>Index scores from MaxDiff (100=average)</th>
<th>Applicants</th>
<th>Higher socio-economic applicants (SEG AB)</th>
<th>Lower socio-economic applicants (SEG C1–E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I just always expected to go</td>
<td>76</td>
<td>86</td>
<td>62</td>
</tr>
<tr>
<td>Getting a student loan towards living costs</td>
<td>59</td>
<td>49</td>
<td>74</td>
</tr>
<tr>
<td>Getting a bursary or financial help from a university</td>
<td>42</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Living costs</td>
<td>38</td>
<td>33</td>
<td>45</td>
</tr>
<tr>
<td>Getting a non-repayable grant/bursary towards living costs</td>
<td>34</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>The level of tuition fees</td>
<td>25</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>My parents expect(ed) me to</td>
<td>21</td>
<td>22</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: S. Fagence and J. Hansom (March 2018)

One reason for the high ranking of financial/status benefits of job and pay, and the much lower ranking of costs is that degrees may now be seen as a must have qualification.

In their study of young people in London (focus groups with 42 young people), Partnership for London found that: “London was largely seen as a city in which getting a degree was a near necessity to working, with opportunity being less for non-graduate roles”37.

This is not to say that finance is an insignificant factor in the equation. Figure 7 shows that for those who were put off by the cost of university but still applied (54% of all applicants) those from lower SEGs were more likely to mention: the repayment threshold (71%), maintenance loans (70%), maintenance grants (63%) and the availability of a bursary from the university (42%). Those from higher SEGs were more likely to mention the ability of their parents to support them financially, and being able to draw on their own earnings or savings.

Figure 7  
For those put off by HE costs, which aspects of funding persuaded you to apply to university?

37 Partnership for Young London (September 2017), Young people’s perceptions and attitudes of their post-16 options: Full report
Smith et al. (2015) undertook research into the progression of Level 3 FE and Sixth Form College students in England, both young people and mature students. The study used matched ILR and HESA data to follow five cohorts of young people longitudinally. The last cohort was tracked for one year entering in 2012, the year in which tuition fees were increased to a maximum of £9,000 per year. The progression rate for those proceeding to study HE immediately following their college course averaged 34% increasing to 48% when tracked over a number of years.

The authors found that HE progression rates were initially hit by the 2012 tuition fee increase but then recovered to 33%. However:

“...the mean rate for the whole cohort masks a different picture when you examine progression looking at underlying demographic characteristics. Progression rates for the young Level 3 group who entered higher education in 2012 were 37% and this is considerably lower than the rate for the first tracked cohort who entered HE in 2008, 49%. This drop in rates for young FE students was countered by an increase in

38 S. Smith et al (September 2015), Progression of College Students in England to Higher Education. BIS
39 A total of 1,855,050 Level 3 students from FE and Sixth Form Colleges were tracked over five years (2008-2012). 82% were from FE Colleges and 18% from Sixth Form Colleges. 70% of the students tracked were aged 17-19, 30% were adults over 20. 729,425 or 40% of the students tracked were from the most disadvantaged neighbourhoods in the country.
progression rates for the mature groups, where trends show their rates increased (despite the fee increase).  

Around one in seven (15%) students studied HE in an FE College. Of these just under three quarters (71%) progressed to degree and Other Undergraduate programmes in FE. 29% progressed to “non-prescribed” HE, such as, professional qualifications and NVQs at levels 4 and 5. Those from disadvantaged neighbourhoods were the most likely to progress to HE in FE. 29% of the FE and Sixth Form College students in 2011-12 who progressed to HE came from the most educationally disadvantaged neighbourhoods in England. Of these, 42% progressed to HE in FE. 

Callender and Mason (2017) 41 appear to confirm the findings from the Partnership for London study (see above) in that HE is considered a relatively good investment, and that this understanding had increased over time. In 2015, 74% of students agreed with a statement that “borrowing money to pay for a university education is a good investment” compared with 52% in 2002. However, students from lower SEGs were more likely to be risk averse, and this risk aversion has increased over time: “…with lower-class students exhibiting more debt averse attitudes than upper-class students in 2015, and much more averse attitudes than lower-class students in 2002. Middle-class students in 2015 are not more debt averse than lower-class students” 42. The authors also found that this higher level of debt aversion contributed to significantly higher levels of deterrence to entering HE. The authors concluded: 

“Lower-class students are still far more likely than students from other social classes to be deterred from planning to enter higher education because of fear of debt. This applies both to the comparison between lower- and upper-class students and between lower- and middle-class students even though levels of debt aversion are similar among middle-class and lower-class students. Debt aversion seems more likely to deter anticipated higher education participation among lower-class students in 2015 than in 2002” 43. 

Thus whilst young people “recognize that higher education is essential for a well-paid job” 44 student loans and increased tuition fees are much more of a deterrence to those from low SEGs. 

3.3.2. Mindset 

Section 3.2.2 reported on analysis of the PISA that found that an individual’s mindset played an important role in decision making. It also plays a key role in attainment which
is, itself, related to outcomes. A number of studies have developed typologies of mindsets which shape an individual’s choice behaviour. For example, Gati and Amir (2010)\(^{45}\) identified the following mindsets in their study of the decision-making of 14-year olds, including: determined realist, indecisive worrier, comfort seeker and unrealistic dreamer. A number of studies have highlighted the role of growth mindsets\(^{46}\), and resilience and ‘grit’ in helping people choose and achieve the outcomes they want\(^{47}\).

Analysis of PISA data led Denoel et al. (2017)\(^{48}\) to conclude that mindsets - students’ attitudes and beliefs – were strong predictors of student outcomes on PISA test scores:

“…in Europe mindset factors explain a greater proportion of a student’s PISA score (29 percent) than even the home environment (18 percent)…In the 2015 PISA assessment, the most predictive mindset is…”motivation calibration”…[which] is more than twice the impact of self-identified motivation…students from the lowest socioeconomic quartile who are well calibrated perform better than those from the highest socioeconomic quartile who are poorly calibrated”\(^{49}\). The authors found similar results in non-EU countries.

Figure 1 Factors driving European student OECD PISA science performance 2015 (% of predictive power by category of variable)


\(^{47}\) A. Duckworth (2016), Grit: The Power of Passion and Perseverance Hardcover


\(^{49}\) Ibid.
In poorly performing schools, having ‘well-calibrated’ motivation enables those from the lowest SEGs to ‘leapfrog’ those from the highest SEG (see Figure 2). Other mindsets were also predictive of student outcomes including believing that one’s school science work will be useful for one’s future career. And students with a strong growth mindset (those who believe they can succeed if they work hard) outperform students with a fixed mindset (those who believe that their capabilities are static) by 11 percent in EU. Girls are more likely to have strong motivation calibration, but this tends to be compromised by their higher levels of test anxiety.

However, a meta-analysis of the evidence on growth mindsets found mixed results\textsuperscript{50}. Sisk et al. (2018) undertook two meta-analyses: the first examined the strength of the relationship between mind-set and academic achievement and potential moderating factors; and the second examined the effectiveness of mindset interventions on academic achievement and potential moderating factors. They found weak effects in both instances. They did find support for particular aspects of mindset theory for those individuals facing challenges, in particular finding significant effects for academically high-risk students and low-SES students.

### 3.3.3. Access to information, advice and guidance

The quality and quantity of information is seen by many as a key determinant of the decision making process and the choices that result.

For those furthest from the labour market, their socio-economic and demographic characteristics determine (a) whether they are consciously making a decision about their

future labour market options; (b) if they are, then the options available to them; and (c) access to good information to make those decisions.

The All-Party Parliamentary Group (APPG) for Youth Employment found that IAG is still important to such young people, provided it is personalised, aspirational and practical, and includes support with soft skills. Work experience is also beneficial in supporting them to make progress\(^51\).

Much IAG is currently biased towards particular routes, especially HE and away from vocational options:

“In 1998, Fuller and Unwin found how young people were forced to choose between an educational divide, between the formal and informal educational sectors. Yet what has emerged from this research is that young people very rarely see it as a choice, let alone one between two equally weighted options. University was continually perceived to be more respected, more prestigious, leading to better wages, more opportunity, and to provide a better standard of knowledge than apprenticeships. This is due, in part, to an inequality in the level of information and understanding that is provided to young people on their options”\(^52\).

Many observers believe this to still be the case.

In their focus groups with young people, the Partnership for Young London found that young people struggle to even define an apprenticeship, what they entailed and even which age group they were for. Whilst those aged 16+ had some notion of what an apprenticeship was, those aged 14-16 had none. Young people said they relied on schools and teachers to provide them with impartial advice, but this did not happen. Schools only emphasised progression into their sixth forms. This causes young people to rely on information from their peers. As a result, apprenticeships are seen as unconventional and for those with different learning styles\(^53\).

Partnership for Young London, as well as other observers, define a ‘royal route’, a frictionless, straightforward route which is encouraged by most influencers, but is most suited for those who are relatively well qualified and advantaged. This contrasts with the non-HE route which is relatively much more complex and more populated by those with the least information resources. Bizarrely, most IAG resources are focused on supporting the former rather than the latter\(^54\).

\(^{51}\) All Party Parliamentary Group on Youth Employment Report (2017), Those Furthest From The Labour Market: An inquiry into best practice that helps young people furthest from the labour market into employment

\(^{52}\) Partnership for Young London (September 2017) op cit

\(^{53}\) Ibid.

\(^{54}\) E. Keep (June 2009), Internal and External Incentives to Engage in Education and Training – a Framework for Analysing the Forces Acting on Individuals? ESRC Centre on Skills, Knowledge & Organisational Performance, Monograph No. 12
In the study of apprenticeship recruits to the University of Sheffield’s Advanced Manufacturing Research Centre, McIntosh (2017) found that most recruits were neither encouraged nor discouraged by their schools\(^{55}\). Engineering apprenticeships at the AMRC are in demand and as a result the: “…respondents were young, mostly aged 16-18, well-qualified, almost all having 5 or more good GCSEs including English and Maths, and half having at least one parent in a professional or managerial occupation”\(^{56}\).

![Encouragement from school for doing an apprenticeship](image)

Source: S. Macintosh (March 2017)

Figure 3 shows that 54% of respondents had neither received encouragement nor discouragement in pursuing an apprenticeship. Similar proportions (22%/23%) were either actively encouraged or discouraged. This was marginally higher for 16-18 year olds than 19+. The highest levels of encouragement and discouragement were for those qualified to below Level 3, presumably these young people were making their decisions whilst at school.

With limited encouragement, and active discouragement for some, the apprentices had to rely on other sources of information. Whilst fewer than one third were able to rely in information provided by the school or college they attended most (56%) sourced information from the AMRC itself, 54% from friends and family, and 39% from the Apprenticeship website. Only 13% received information from a careers advisor.

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\(^{55}\) S. McIntosh (March 2017), The Decision to Undertake an Apprenticeship: A Case Study. CVER Briefing Note 002

\(^{56}\) Ibid.
Table 10  
Source of information about apprenticeships

<table>
<thead>
<tr>
<th>Source of information</th>
<th>All %</th>
<th>Qualified to below Level 3 %</th>
<th>Qualified to Level 3+ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Apprenticeship Website</td>
<td>39</td>
<td>33</td>
<td>56</td>
</tr>
<tr>
<td>Current/previous employer</td>
<td>10</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>School or college previously attended</td>
<td>31</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>The AMRC</td>
<td>56</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Careers Advisor, Next Steps, Connexions</td>
<td>13</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Jobcentre Plus</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Friends and family</td>
<td>54</td>
<td>58</td>
<td>44</td>
</tr>
<tr>
<td>Internet</td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>None of these</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: S. Macintosh (March 2017)

The poor level and quality of advice for those wanting to pursue non-HE options is a finding from a number of studies. For example, Purcell et al. (2017) concluded that:

“Participants who left education not intending to go into higher education raised a number of key issues with us. These included the absence of well-structured and supportive advice before leaving, along with counselling that was consistent, well-paced and of high quality. The absence of meaningful advice was further compounded by the experiences of those using Jobcentres. While the careers advice provided by some individual advisors and teachers was much appreciated, there appeared significant variation in its quality and timing.”57.

Most participants in the study felt that any IAG they received by the school was too late and rarely detailed enough. Advice provided to them by teachers, lecturers and careers advisers was seen as biased especially in the case of apprenticeships. There was a perception by some respondents that there was an: “...emphasis on getting students into higher education left those not interested in this route feeling “pushed to the side” (Natalie, female, 18, unemployed, Coventry). This echoes the experiences of some graduate respondents who felt that they had been pushed into university without a clear idea of the positive alternatives”58.

One source of information which almost all participants appreciated, was the value of gaining work experience, even though this was of variable quality.

The downgrading of non-HE options is not something unique to the UK. In their comparison of the UK and Denmark Kersh and Juul (2015) found that: “Although the Danish context differs from the English in several important ways the two countries have in common the problem of lack of parity between the academic and the vocational track.

57 K. Purcell et al (September 2017), Young people’s pathways into work: Preliminary findings from the ESRC-funded research Precarious Pathways into Employment for Young People
58 Ibid.
Young people, their parents and society as such tend to attribute more prestige and status to general upper secondary education than to VET\textsuperscript{59}.

The authors found that a key difference between the two systems was a greater esteem for apprenticeships from employers. This is believed to derive from: “The deep involvement of the social partners in the decision-making and daily running of the VET system further underlines the engagement and support of employers in the system”\textsuperscript{60}. This is something that recent UK apprenticeship reforms is trying to achieve.

Figure 4 shows the different tools and resources used by young people pursing different routes\textsuperscript{61}. Differences were found in the use of resources by route and a variety of other learner characteristics. The primary audience for the tool was an obvious distinction with few following an academic route using the NAS website.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{59} N. Kersh and I. Juul (2015), Vocational Education and Training as a Career Path for Young People: Making Choices in England and Denmark. LLAKES Research Paper 52
\item \textsuperscript{60} Ibid.
\item \textsuperscript{61} CFE Research (December 2017) op cit
\end{itemize}
\end{footnotesize}
Figure 4  Which tools and resources young people used in order to help make decisions about what to do after Year 11/13 by route

Source: CFE Research (December 2017)

Figure 5 shows the individuals young people spoke to in helping them make their decision. Those following technical routes (FE/HE) were much less likely to have consulted their subject teachers (48% compared to 69% / 68% for those following HE (Academic) / FE (Academic) options) and their friends (48% compared to 69% / 68%).
Figure 5  Which individuals young people spoke to in order to help make decisions about what to do after Year11/13 by route

<table>
<thead>
<tr>
<th>Source: CFE Research (December 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Figure 6</strong> provides rankings of the helpfulness of different individuals in supporting decisions. Open days, subject teachers, family, and employers were seen as the most reliable sources of information.</td>
</tr>
</tbody>
</table>

However, there were slight differences in the helpfulness of different individuals by different routes. Despite the perceptions mentioned above, careers advisers in schools were seen as similarly helpful for young people in the three routes: for those following FE Academic routes 70% found careers advisers in school either helpful or very helpful compared to 72% on the HE Academic route and 68% on the FE/HE Technical route. Equitable levels of helpfulness for young people on the three routes were also found for external careers advisers, family, friends, and staff during open days. The biggest difference was for subject teachers. Three quarters (74%) of those on FE/HE Technical routes found their subject teachers helpful or very helpful, compared to 91% on the HE Academic route and 90% on the FE Academic route. Nevertheless, this does not appear to tally with the level of school IAG bias reported in other studies.
The report concludes with young people’s views on the IAG available to them. Table 11 shows that those on the technical route were twice as likely to disagree with the statements: ‘I didn’t know where to find the information I needed’; ‘I did not know which source of information I could trust’; and ‘I did not use the help and resources available but now wish I had’. This suggests that those on the technical route, whilst the majority were satisfied with the IAG they used, did find it harder to find out about and access IAG.

Those on a technical FE/HE route were also much less likely to say they were wanting to do ‘the same thing as their friends’.
### Table 11 Proportion of respondents who strongly disagree with statements about IAG by route

<table>
<thead>
<tr>
<th>Statement</th>
<th>Technical (FE/HE)</th>
<th>FE (Academic)</th>
<th>HE (Academic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I didn’t know where to find the information I needed to help me make a decision</td>
<td>25%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>I was not aware that there was information, advice and guidance available to help me with my decision-making</td>
<td>24%</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>I did not know which source of information I could trust to give me accurate information</td>
<td>16%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>I did not use the help and resources available but now wish I had</td>
<td>26%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>I could not find all the information I wanted to make a fully informed decision</td>
<td>21%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>I wanted to do the same thing as my friends</td>
<td>54%</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>I would have found it easier to make a decision if all the information about the courses and how to apply was in one place</td>
<td>8%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: CFE Research (December 2017)

### 3.3.4. Socioeconomic group

A key feature of the analysis of many of the above studies is that the choice architecture, IAG resources and spread of options is much more restricted for those from lower SEGs.

Table 12 shows a variety of learner characteristics by route, many of which are closely related to SEG. For example, those in receipt of Free School Meals (FSM) or a 16-19 Bursary are much more likely to be on the Technical FE/HE route, as are those whose parents did not go to university, and if their parent did an apprenticeship.

Within specific groups of 16-18 year olds, those from disadvantaged areas are less likely to progress to HE and, if they do, are more likely to be undertaking non-degree courses, and attending HE on FE.

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62 There are similar arguments made for other disadvantaged groups (e.g. ethnicity and disability) but it was agreed that the study would not explore these.

63 S. Smith et al (September 2015) op cit.
Table 12  Learner characteristics by route

<table>
<thead>
<tr>
<th></th>
<th>FE (academic)</th>
<th>HE (academic)</th>
<th>Technical (FE/HE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of school attended</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintained school</td>
<td>83.4%</td>
<td>74.3%</td>
<td>87.1%</td>
</tr>
<tr>
<td>Independent</td>
<td>7.1%</td>
<td>10.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Grammar School</td>
<td>7.7%</td>
<td>11.4%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Other type of school</td>
<td>0.9%</td>
<td>3.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>560</td>
<td>510</td>
<td>920</td>
</tr>
<tr>
<td><strong>Highest level of qualification held</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No qualifications</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Level 1</td>
<td>2.1%</td>
<td>0.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Level 2</td>
<td>68.8%</td>
<td>1.7%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Level 3</td>
<td>27.3%</td>
<td>96.4%</td>
<td>44.3%</td>
</tr>
<tr>
<td>Level 4 or above</td>
<td>0.5%</td>
<td>1.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>I’m not sure</td>
<td>1.1%</td>
<td>0.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>561</td>
<td>530</td>
<td>926</td>
</tr>
<tr>
<td><strong>FSM or 16-19 Bursary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>74.1%</td>
<td>79.3%</td>
<td>63.2%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>491</td>
<td>468</td>
<td>809</td>
</tr>
<tr>
<td><strong>Learner has a disability, learning difficulty or long-term physical or mental health condition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11.9%</td>
<td>12.3%</td>
<td>13.7%</td>
</tr>
<tr>
<td>No</td>
<td>88.1%</td>
<td>87.7%</td>
<td>86.3%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>4.5%</td>
<td>3.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>561</td>
<td>530</td>
<td>926</td>
</tr>
<tr>
<td><strong>If parents go to university</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>41.0%</td>
<td>45.1%</td>
<td>28.6%</td>
</tr>
<tr>
<td>No</td>
<td>57.4%</td>
<td>52.6%</td>
<td>65.7%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>1.6%</td>
<td>2.3%</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>561</td>
<td>530</td>
<td>926</td>
</tr>
<tr>
<td><strong>If parents did an apprenticeship</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10.2%</td>
<td>9.6%</td>
<td>15.6%</td>
</tr>
<tr>
<td>No</td>
<td>82.9%</td>
<td>84.0%</td>
<td>74.5%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>7.0%</td>
<td>6.4%</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>561</td>
<td>530</td>
<td>926</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43.5%</td>
<td>59.6%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Female</td>
<td>56.5%</td>
<td>40.4%</td>
<td>59.2%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>561</td>
<td>530</td>
<td>926</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Asian British</td>
<td>13.7%</td>
<td>14.2%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Black/African/Caribbean/Black British</td>
<td>3.6%</td>
<td>2.3%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Mixed/multiple ethnic groups</td>
<td>3.9%</td>
<td>3.4%</td>
<td>3.3%</td>
</tr>
<tr>
<td>White</td>
<td>76.5%</td>
<td>77.7%</td>
<td>76.6%</td>
</tr>
<tr>
<td>Other ethnic group</td>
<td>1.4%</td>
<td>1.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>0.9%</td>
<td>1.1%</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Base</strong></td>
<td>561</td>
<td>530</td>
<td>926</td>
</tr>
</tbody>
</table>

Source: CFE Research (December 2017)

The role of SEG in learning and skills decision making is complex. In part, SEG is closely related to prior attainment which is the best predictor of future outcomes (see below). Others believe it is due to the influence of parents either through the socialisation process and/or at the point of decision in encouraging or discouraging various options (see below). Whilst others conclude it is the role of agency and social
capital which includes or excludes different options, and young people’s perceptions of which options are ‘right’ for them.

Hedges and Speckesser (2017) examined whether the educational choices that young people make after the completion of their GCSEs (at age 16) are influenced by their peers. The authors conclude that:

“…higher ability peers reduce the likelihood that an individual will choose a vocational course at age 16 after controlling for the individual’s own ability. We also find a very strong effect of household income on education choices, showing that the more deprived a student’s background is, the more likely they are to opt for a vocational trajectory over an academic one”.

Whilst an individual’s ability (as measured by their KS2 score is the main driver of educational choice (technical or academic) peers significantly impact on the choice as well. Furthermore, the study found that SEG (as measured by deprivation using the IMD) was a significant predictor of education choice.

One of the problems is that SEG is often used as a catch-all term to encompass a range of factors – deprivation, disadvantage and disaffection – which are often not related to SEG.

In a study of young people who are NEET, analysis identified the propensity to be within the young people who are NEET group. Figure 7 shows that the top 16 characteristics are not related to SEG but to whether a child is looked after, their attendance, their attainment, and whether they are assessed as having a Special Educational Need (SEN). Of these 27 characteristics only two – Free School Meals (FSM) and living in a deprived area – can be identified as indirect measures of SEG, and the latter is marginally above gender and ethnicity.

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64 S. Hedges and S. Speckesser (November 2017), Peer Effects and Social Influence in Post-16 Educational Choice. CVER Research Discussion Paper 008
65 Department for Education (February 2018), Characteristics of young people who are long-term NEET
3.3.5. Prior educational attainment

Attainment at age 16 is generally seen as a key determinant of post-16 outcomes: “Higher attainment during compulsory school age is associated with higher rates of participation. This is a point strongly made across the literature, and according to some this is the single most important predictor of adult participation in education and training”\textsuperscript{66}. This report highlights analysis of longitudinal data from the NCDS and BHPS longitudinal survey data which found that early school attainment is the best factor predicting progression by age 33 and by age 42.

\textsuperscript{66} S. Smith (September 2015)
The issue with prior educational attainment as a determinant of outcomes on its own is that it is highly related to SEG. Whitty and Anders present the results of an analysis by Feinstein\textsuperscript{67}.

**Figure 8** Average rank of test scores at 22, 42, 60 and 120 months, by SES of parents and early rank position

Notes: The definition of categories with sample observations are as follows: high SES - father in professional/managerial occupation and mother similar or registered housewife (307 obs.); low SES - father in semi-skilled or unskilled manual occupation and mother similar or housewife (171 obs.); medium SES - those omitted from the high and low SES categories (814 obs.).


This demonstrates that, even before starting school, children with high cognitive test scores from disadvantaged backgrounds are falling behind less able children from more advantaged backgrounds. This would appear to suggest that, rather than having predictive power on its own, prior attainment is closely related to SEG. The counterargument is that studies highlighting prior attainment’s predictive power usually control for SEG and find the former has more significant explanatory power.

Using the life-course approach discussed above, it is possible to conceptualise the interplay between closely related factors:

\textsuperscript{67} G. Whitty and J. Anders (December 2012), (How) did New Labour narrow the achievement and participation gap? LLAKES
“While educational attainment at school may be the most important determiner of subsequent adult learning, this does not singly determine the likelihood of the individual to progress. Learning pathways are dependent on the interaction of other factors occurring through the life-course, such as those related to home and family life... Sabates et al. (2007) argue that early educational attainment remains a central determiner: factors ‘...tend to reinforce one another such that those at early disadvantage continue to be at greater risk of non-progression throughout their lives, while those who established positive early trajectories are more likely to maintain involvement in learning. This may be a reflection of the positive effects of underlying personal factors such as ability or enjoyment of learning, or conversely, the negative effects of difficulties in mastering skills, or antipathy to learning’”68.

Sabates et al. (2017) go on to say: “However, that propensity to learn is not fixed. It has been shown for example that learning in adulthood can influence attitudes and well-being and that this in turn can encourage further participation in learning”.

In their study tracking the FE Level 3 population longitudinally, Smith et al. (2015) found that some students do not progress into HE immediately but enter 2-5 years later. Both progression and attainment are achieved by people following different trajectories: “Achievement rates of FE and Sixth Form College students who progress to First degrees at university hold up well when compared to all England figures for both school and college entrants (75% compared to 79% for all England). The proportion of FE and Sixth Form College students achieving a good degree (First or 2:1) was 62% compared to all UK qualifiers where the rate is 64%. When put into the context of the relatively high proportion of students coming from disadvantaged backgrounds, these figures illustrate the important role the FE sector has in offering alternative pathways to success and ultimately increased opportunities for social mobility”69.

3.3.6. Gender

A key factor, especially in vocational choices, is gender. However, the decisions between the broad learning and skills options tends to be quite balanced between women and men.

The proportion of young people (16-24) who are NEET has, historically, been higher for women that it is for men. At the beginning of the decade the gap between men and women who are NEET was around three percentage points, but that gap has now disappeared70. However, the reasons vary significantly between women and men.

69 S. Smith (September 2015)
70 Department for Education and National Statistics (August 2017), NEET Statistics Quarterly Brief April to June 2017, England
Women tend to be NEET because they are economically inactive whilst men are more likely to be unemployed (see Section ?.?).

Similarly, whilst apprenticeship rates between men and women are similar, the Standards/Frameworks they choose are very different (see Section ?.?). In 2016/17, 54% of apprenticeship starts were by women and 46% by men71.

In HE, the gender split was similar to apprenticeships with women accounting for 57% of HE starts. As with apprenticeships, it is less the broad option which differentiates men and women but their specific subject choices72.

Research by the Centre for Longitudinal Studies found that the HE expectations of girls at age 14 was greater than that of boys73. Figure 9 shows that, on average, girls reported a 71% chance of going, whereas the proportion for boys 63%. Girls also tended to be more certain that they would be going to university with 14% of girls 100% certain they would go into HE compared to 10% of boys.

Figure 9 How likely do you think it is that you will go to university? By gender

Source: Centre for Longitudinal Studies (December 2017)


72 Universities UK (July 2017), Patterns And Trends In UK Higher Education 2017

73 Centre for Longitudinal Studies (December 2017), The university and occupational aspirations of UK teenagers: how do they vary by gender? Initial findings from the Millennium Cohort Study Age 14 Survey
3.3.7. Barriers and incentives

There is a wealth of evidence on the barriers and motivators underpinning learning and skills and labour market choices. These are summarised in Figure 10\(^74\). A number of these have been discussed above. They are usually categorised into ‘physical’ (e.g. financial, time and access restraints); ‘structural’ (e.g. lack of availability of learning opportunities and disincentives to learning); and, ‘attitudinal’ (e.g. lack of confidence, motivation, and perceptions of irrelevance). But, as we have seen and will discuss, SEG, access to and quality of information, parents, peers and schools can all affect whether people are aware of them, which ones they are aware of and the weights they attach to them. In turn they impact on people’s choice making and non-choice making. For example, young women aged 16-24 are more likely to be economically inactive and this is linked to childcare. Soon after childbirth it is unrealistic to expect women to be thinking about learning, and labour market choices. However, as their children get older then the available options will be more dependent on the provision and availability of childcare and flexible working/studying offered by an employer or a provider. As the child progresses through school, then this can serve as a motivator for parents to improve their literacy, numeracy and other skills in order to support their child’s education.

The literature on barriers and motivators is good at identifying a range of factors which stimulate or challenge options and choices. But it serves less well in exploring the nuances of a barrier being a driver for one person but not another. And a driver at one point in an individual’s life becoming a barrier at another time. In addition, different drivers and challenges exist and can have different weights depending on at what point an individual is in their learning and skills, and labour market pathway. For example, different factors will impinge to varying degrees on whether someone is close to or distant from making a decision about their future options, and whether they are considering broad options (e.g. technical academic education and training) or more specific decisions around which provider to choose.

\(^{74}\) P. Dickinson (March 2011) op cit
**Factors shaping individuals’ choices and behaviours towards participation in education and learning**

- **Time-related drivers** are key for individuals – instrumental reasons of employability, career, personal professional development, and wages are important.
- The vast majority of level 2 learners are vocational.
- Key vocational motivations are to gain new skills in current job, career development, and to gain more satisfaction in work.
- Employability and career prospects are particularly important for HE.
- Work-based training is more likely for the highly skilled and qualified.
- Full-time employees are more likely to engage in education/training.
- Employer compulsion is a minor factor.

- **Cost concerns** are more important at higher FE levels.
- Low labour market demand for skills/qualifications.
- Lack of opportunities and support provided to employees (this depends on type of occupation).
- Time pressure on the individual.
- Individuals’ awareness of the benefits of training and qualifications.
- Individuals’ desire to work rather than go into education/training.

- **Motivators/enablers**
  - Personal interest or learning benefit.
  - Perceived need for qualifications.
  - Philosophy of personal development.
  - Novelty of experience.
  - To gain new skills in current job.
  - To gain more satisfaction in work.
  - Personal interest in or enjoyment of subject.

- **Barriers/inhibitors**
  - Cost concerns are more important at higher FE levels.
  - Low labour market demand for skills/qualifications.
  - Lack of awareness of rate of return of quals.
  - Lack of enabling resources (IT equipment).
  - Real costs and opportunity costs.

- **Monetary resources (direct and indirect costs, real costs and opportunity costs).**
  - Costs are a barrier for some more than others.
  - Many L2 learners would pay for courses.
  - Fee remission could be a trigger to learn for some.
  - Lack of awareness of rate of return of quals.
  - For HE, cost is of relatively low importance for participation (more important for choice of institution).
  - Cost concerns are more important at higher FE levels.
  - Lack of enabling resources (IT equipment).

- **Social networks and place**
  - Attachment shape aspirations and intentions (narrow horizons - economic constraints are less influential than other factors).
  - Peer group culture and norms.

- **Intrinsic factors**
  - Level of confidence.
  - Level of self-esteem.
  - Level of motivation.
  - Self-efficacy, especially at lower levels.
  - Misjudged self-assessments of skills.
  - Learning is found too difficult.

- **Progression and aspiration**
  - Progression pathways are not necessarily clear-cut and linear.
  - What constitutes progression is diverse and dynamic.
  - 57% of those in FE study at a lower level than their highest qualification.
  - Progression routes into HE involve different decision-making processes.

- **Attitudes and values**
  - Level of interest in learning.
  - Other preferences for free-time.
  - Feeling to old to learn.
  - Negative attitudes to learning.
  - Perception of irrelevance (no tangible benefit).
  - Personal interest in or enjoyment of something new are motivations for some.

- **Time pressure**
  - Commitments, responsibilities and other priorities (especially caring and domestic).

- **Career**
  - Better educational attainment at school.
  - Undertaken previous learning activity.
  - Employed (non-manual occupation).
  - Higher socio-economic status.
  - Younger.

- **Social circumstances which can produce turbulence and unpredictability in life**
  - Shifting priorities and circumstances.
  - Social attachments shape aspirations.

- **Economic constraints** are less influential than other factors.
  - Personal interest or learning benefit.
  - Philosophy of personal development.
  - Novelty of experience.
  - To gain new skills in current job.
  - To gain more satisfaction in work.
  - Personal interest in or enjoyment of subject.

- **Socio-economic constraints are less influential than other factors.**

- **Family and friends culture and norms**
  - Shifting priorities and circumstances.
  - Social attachment shape aspirations.

- **Localised outlooks** can inhibit and confine choices and progression routes.

- **Peer group reinforcement**
  - Personal interest or learning benefit.
  - Philosophy of personal development.
  - Novelty of experience.
  - To gain new skills in current job.
  - To gain more satisfaction in work.
  - Personal interest in or enjoyment of subject.

- **Teaching cultures associated with adult community learning.**
  - Practical, work-shop based activities and community venues are preferred by some learners.
  - The social aspect of learning is important.
  - Teacher encouragement can be important in pushing people further.

- **Informal learning activity extended into more formalised learning**.
  - Informal learning can be important in provoking new skills, confidence and social opportunities.
  - Appropriate timing and location arrangements for childcare.
  - Flexible, tailored courses.
  - Effective support for learners.
  - Attaining Level 2 and below can be a springboard for further learning.

- **Lack of IAG**
  - Learners who use IAG in making decisions about learning are more likely to continue learning in the future.
  - Good on programme IAG.

- **Monetary resources** are more important at higher FE levels.

- **Money is for pay amongst some people.**
  - Cost concerns are more important at higher FE levels.

- **Home and family**
  - Commitments, responsibilities and other priorities (especially caring and domestic).

- **Wider social relations**
  - Better educational attainment at school.
  - Undertaken previous learning activity.
  - Employed (non-manual occupation).
  - Higher socio-economic status.
  - Younger.

- **Work**
  - Better educational attainment at school.
  - Undertaken previous learning activity.
  - Employed (non-manual occupation).
  - Higher socio-economic status.
  - Younger.

- **Learning environment and provision**
  - Time pressure.
  - Commitments, responsibilities and other priorities (especially caring and domestic).

- **Motivators/enablers**
  - Personal interest or learning benefit.
  - Philosophy of personal development.
  - Novelty of experience.
  - To gain new skills in current job.
  - To gain more satisfaction in work.
  - Personal interest in or enjoyment of subject.

- **Barriers/inhibitors**
  - Cost concerns are more important at higher FE levels.
  - Low labour market demand for skills/qualifications.
  - Lack of awareness of rate of return of quals.
  - Lack of enabling resources (IT equipment).
  - Real costs and opportunity costs.

- **Attitudes and values**
  - Level of interest in learning.
  - Other preferences for free-time.
  - Feeling to old to learn.
  - Negative attitudes to learning.
  - Perception of irrelevance (no tangible benefit).
  - Personal interest in or enjoyment of something new are motivations for some.

- **Time pressure**
  - Commitments, responsibilities and other priorities (especially caring and domestic).

- **Motivators/enablers**
  - Personal interest or learning benefit.
  - Philosophy of personal development.
  - Novelty of experience.
  - To gain new skills in current job.
  - To gain more satisfaction in work.
  - Personal interest in or enjoyment of subject.

- **Barriers/inhibitors**
  - Cost concerns are more important at higher FE levels.
  - Low labour market demand for skills/qualifications.
  - Lack of awareness of rate of return of quals.
  - Lack of enabling resources (IT equipment).
  - Real costs and opportunity costs.

- **Monetary resources** are more important at higher FE levels.

- **Money is for pay amongst some people.**
  - Cost concerns are more important at higher FE levels.

- **Home and family**
  - Commitments, responsibilities and other priorities (especially caring and domestic).

- **Wider social relations**
  - Better educational attainment at school.
  - Undertaken previous learning activity.
  - Employed (non-manual occupation).
  - Higher socio-economic status.
  - Younger.

- **Work**
  - Better educational attainment at school.
  - Undertaken previous learning activity.
  - Employed (non-manual occupation).
  - Higher socio-economic status.
  - Younger.
3.4. (RQ1aii) Who influences the choices they make (for e.g. parents, peers, pre-18 teachers?)

The role of different people – parents and IAG advisers – and the extent of their influence has been covered in the previous section. To summarise:

- School, college, and careers advisers and parents were used differently by those taking different HE/FE academic and vocational routes, and offered different levels of encouragement (McIntosh, March 2017).

- Those following technical routes were much less likely to have consulted their subject teachers and their friends (CFE Research, December 2017).

- There were slight differences in the helpfulness of different individuals by different routes (CFE Research, December 2017).

- The ability of one’s peers influences post-16 choices, although this is mediated by an individual’s ability and their parent’s income (Hedges and Speckesser, November 2017).

- The role of parents is difficult to disentangle from other factors. Are parents influential because they are from a specific SEG, live in a particular area, have access to different ranges and quality of IAG, have restricted or expansive social networks, have access to different levels of resources (and are thereby able to offset some particular barriers), and/or because of their role in their child’s prior attainment?

In their study of Year 11/13 choices, CFE Research found that parents/carers and other relatives were the individuals consulted most by young people following each of the three routes – Technical FE/HE, HE (Academic) and FE (Academic) - followed by subject teacher, and friends (see Figure 5). 85% of young people found parents et al, and subject teachers to be helpful or very helpful, with 70% saying the same about friends (see Figure 6).

In their focused study on apprentices at Sheffield University’s AMRC, parents were identified as much more encouraging than schools75. Whilst only one quarter of 16-18 apprentices said their schools encouraged them a little or a lot, 90% said their parents were encouraging.

Whitty and Anders found that schools in London, under New Labour, were able to support disadvantaged children through collaborative approaches under the London Challenge (which is attributed with helping London schools go from the worst performing to amongst the best in the country): “…these initiatives [e.g. literacy and teacher performance] have recognized the importance of countering wider influences on

75 S. McIntosh (March 2017)
educational performance to a greater extent than has sometimes been apparent in recent policy rhetoric, which has tended to emphasise school autonomy and school-level initiatives. Schools were able to change the options available to young people by offsetting the negative effects of disadvantage and low prior attainment.

Another way which schools can affect choice is through channelling young people into sixth forms and thereby onto the ‘Royal route’ of academic 16-18 options into HE. This also has the consequence of reducing the options for young people who, all other things being equal, would progress into more suitable vocational options.

Part of the literature and analysis on the impact of school differentiates between independent and other selective schools, and mainstream schools. Anders et al. (2017) found that the subjects that young people study from age 14 onwards impact on their future academic and labour market outcomes. The choice of subject at 14-16 was believed to prime future learning and skills choices. The authors ranked subjects according to their academic selectivity, by calculating the average prior academic attainment of pupils who study for each one. This placed languages and science subjects at the top, and ‘applied’ subjects (e.g. Applied Hospitality) at the bottom. They found that:

“...young people’s prior attainment, socio-economic background, and gender are all associated with the subjects they study at age 14-16. We find that individuals in schools with more advantaged intakes are more likely to study more academically selective subjects, even after conditioning on individuals’ own SES. Individuals’ prior attainment is associated with studying more academically selective subjects as, again, is the prior attainment of the school more generally. Overall, schools explain about a third of the variation in the academic selectivity of the subjects that young people study; once we take into account the demographics of the school this is reduced to closer to a quarter”.

However, Callendar and Mason (2017) found that there is now little difference between school type when analysing anticipated HE participation. They found that encouragement form teachers played a significant role in expectations of HE participation. But whilst for pupils in 2002, independent schools had a greater positive effect any difference had disappeared by 2015.

76 G. Whitty and J. Anders (December 2012)
77 Partnership for Young London (September 2017)
79 C. Callendar and G. Mason (2017)
3.5. (RQ1bii) What are the most important factors when marginal students (i.e. those on the HE-FE borderline) choose between HE and FE? For similar outcomes and qualifications; why do students choose more costly HE routes rather than lower cost FE routes?

Very few studies have considered the effects decision making at the margin. Many of the studies focus on set groups of people such as: in broad SEG groups; at broad types of schools; resident in least and most deprived areas; and achieving above and below 5 ‘good’ GCSEs. Detailed analysis of these measures highlights the complexity of the concepts they are trying to operationalise. For example, one in five people in households where no adults worked are in persistent low income as are similar proportions of those who: live in socially rented accommodation; where adults have no qualifications; and were children of lone parent families.

Given the often conflicting findings or the absence of relationships in the literature above, perhaps it is at the margins where these differences manifest themselves. People living in the most deprived areas will demonstrate a wide range of characteristics across occupation, income, social networks and prior attainment. Young people in families at different ends of these continua are likely to have quite different socio-psychological and material resources when it comes to making decisions.

![Figure 11](source: CFE Research (2017))
The literature above suggests that, despite increases in HE fees, young people are still not put off going to university even though other options may be beneficial to them. This begs the question of course, as how to measure what is beneficial or not. Whether one route is of greater objective benefit to an individual (if that could ever be measured) the large majority of young people are happy with the resultant choices. CFE Research found that 87% of those taking the Technical (FE/HE) route were satisfied or very satisfied, compared to 89% taking the HE (Academic) route, and 90% on the FE (Academic) route. The respective percentages for those who were dissatisfied or very dissatisfied were 6%, 5% and 4%.

Only one study has looked at decision making at the margins. The effect of slight differences in prior attainment was examined in a study which looked at the effect of passing or failing English GCSE at Grade C in Year 11\(^80\). The study found that: “…students of the same ability have significantly different educational trajectories depending on whether or not they just pass or fail this exam. Three years later, students who just fail to achieve the required threshold have a lower probability of entering an upper-secondary high-level academic or vocational track and of starting tertiary education. Those who fail to pass the threshold are also more likely to drop out of education by age 18, without some form of employment”\(^81\).

The consequences of narrowly missing the C grade in English language were a decrease in the probability of enrolling in a higher-level qualification by at least 9 percentage points, and of dropping out of education and training at 18 altogether by four percentage points (where the national average is 12%).

The reason for such significant impact from a marginal pass or fail, according to the authors is: “…that this threshold is used as a signalling device within the education system. Just failing to obtain a grade C narrows the range of opportunities open to students immediately afterwards in terms of the courses, institutions and quality of institution they can attend. We show that many marginal students do not recover from this”\(^82\).

This study demonstrates that there may be critical points on which major decisions can turn as opposed to being in one broad group or another. To some extent, this is where behavioural economics would appear to make an important contribution.

\(^{80}\) S. Machin et al (April 2018), Entry Through the Narrow Door: The Costs of Just Failing High Stakes Exams. CVER
\(^{81}\) Ibid.
\(^{82}\) Ibid.
The Behavioural Insights Team report Moments of Choice developed a stylised decision journey in which there are key decision making points:

- Contextual factors provide a background and basis for decision making creating a ‘running hypothesis’ of what is attainable and desirable.
- Moments of inspiration spark or introduce interest in a pathway or career.
- Moments of choice are when decisions must be made.

The report develops a behavioural segmentation of young people along two axes: information seeking; and openness of option set. It is important to understand in which segment young people are in order to improve their information searches and decision making process. According to this analysis, young people on the margin make poor decisions because their options may be too limited, or their information search behaviours are poor.

Other research by the Behavioural Insights Team has found that the way different messages are presented can attract different people. Different advertisements featuring different messages, attracted different types of applicants to the police service. Whether becoming a police officer was presented as a career, a challenge or serving the community impacted on the number and type of applicants: “…the messages highlighting the challenge or the career benefits were also particularly effective in getting people of color and women to apply”.

This suggests that people making marginal decisions from a range of choices (e.g. which job to apply for) make more intuitive rather than rational judgements.

3.6. (RQ1c) How do students seek out FE and apprenticeship courses and opportunities?

3.7. (RQ1d) What is the effectiveness of different information, advice and guidance (IAG) routes, and which routes do students use?

People tend not to amass a large amount of information before they make a broad decision. They tend to arrive at a decision on a chosen route first (based on an array of factors, see above) and then seek out information about it.

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83 Behavioural Insights Team (2016), Moments of Choice. Careers and Enterprise Company
84 Behavioural Insights Team (October 2016), Behavioral Insights for Cities.
As we have seen the IAG processes of those pursing FE/HE, academic and technical options are very similar. The main differences are in the source of a lot of information because that is the way a lot of information is structured. For example, few people considering HE would consult apprenticeship sources.

Figure 12 Whether sought information in relation to questions when deciding on current course to help inform decision-making by route (% who agreed/strongly agreed)

Source: Warwick IER from data in CFE Research (2017)

In terms of the information young people access about their future options, Figure 12 shows that young people’s main information needs across the three routes is: course entry requirements; and what they will learn. Young people looking to HE Academic

85 CFE Research (2017) op cit
routes are more likely than those on other routes, to want to know about: the satisfaction of previous learners; costs; the availability of financial support; and job, and earnings outcomes. Young people aiming for Technical FE/HE routes were more interested in how the course is assessed. Large proportions of those on the HE Academic, and Technical FE/HE routes also wanted to know about location and accessibility.

These findings chime with other research which has identified: entry requirements; location and accessibility, quality and costs for FE and HE learners. In terms of the ease of accessing this information then young people in each of the three routes had little difficulty. The information young people found it most difficult to get hold of was the earnings and jobs of previous graduates, and dropout rates. But even in these cases people who found it difficult or very difficult never rose above 15%.

As far as careers advice within schools and other providers is concerned, most young people seem to treat it with indifference. It does not appear to rank as a significant source of useful IAG in most of these studies. The National Audit Office in a recent report said that:

“We found that many school pupils do not receive careers advice, either at the right time or at all. Our analysis of published survey data from 2013 found that only 60% of 13- to 14-year-olds had any access to an external careers adviser at school. The Education and Business, Innovation and Skills select committees jointly reported in 2016 that careers education, advice and guidance in English schools is patchy and often inadequate. External careers advice does not necessarily reach those who need it most, and the Department does not have an overarching strategy in this area. The Department acknowledges that careers advice is particularly valuable for children from disadvantaged backgrounds, those who are at risk of disengaging, and those who have disabilities or special educational needs.”

Since the publication of this report the Department for Education has published its careers strategy.

Analysis of the LSYPE found that under the previous system of career guidance apprentices were most likely to get advice from Connexions personal advisers, an external, independent careers service no longer exists. Young people in apprenticeships

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87 National Audit Office (December 2017), The higher education market

88 Department for Education (December 2017)
at age 19-20 were most likely to find out about apprenticeships from their personal contacts (family and friends). Furthermore, the large majority of apprentices also rated this as the most useful source of IAG (68%) compared to teachers, Connexions and apprenticeship websites. This is perhaps why apprentices rated source of IAG highly. Three quarters found the amount of IAG ‘about right’, and ‘at about the right time’, and four out of five (80%) said it was suitable to their needs\(^8^9\).

The authors also found that a key difference between schools that had higher and lower proportions of school leavers entering apprenticeships was when pupils were told about apprenticeships. In those schools where more than 6% of pupils graduated into apprenticeships, 70% told pupils in year 10 or younger compared to just over 50% of other schools.

The report also finds, along with other literature in this review, that employer engagement is very important:

> “Building on previous analyses, this report demonstrates the relationship between the number of employee contacts that a young person recalled receiving and their eventual decision to embark upon an apprenticeship. Analysis of YouGov data for this report has shown that between young people who had never thought about getting an apprenticeship and those who applied successfully for an apprenticeship there is a 7% difference in the amount of employee contacts they recalled. The results show that even a small push from schools and colleges in terms of the number of employer-led apprenticeship events they provide can potentially convert a young person’s initial awareness into actually beginning an apprenticeship”\(^9^0\).

In addition: “…the more employer engagement activities teenagers get involved in the more likely it is they find something new and useful about future careers and qualification”.

### Table 13  Online sources of information used in decision-making

<table>
<thead>
<tr>
<th>Most popular</th>
<th>Mid-popularity</th>
<th>Least popular</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Guardian rankings thestudentroom.co.uk/</td>
<td>Student satisfaction surveys</td>
<td>UCAS</td>
</tr>
<tr>
<td>Times Higher Education</td>
<td>Prospects</td>
<td>National Careers Service</td>
</tr>
<tr>
<td>QS World rankings</td>
<td>Good Universities Guide</td>
<td>Which Uni?</td>
</tr>
<tr>
<td>The Times rankings</td>
<td>Unistats</td>
<td>DLHE</td>
</tr>
</tbody>
</table>

Source: Lyonette et al (2016)

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\(^8^9\) E.T. Kashefpakdel and J. Rehill (2018), Teenage apprenticeships: Converting awareness to recruitment. Education and Employers

\(^9^0\) Ibid.
Lyonette et al. (2016) asked students which sources of information and support are available and considered most useful when applying to university. Compared to research undertaken in 2008, students were much more likely to use university rankings and online sources of information. But they questioned the reliability and validity of online sources. The most and least popular sources of information are shown in Table 13.

Young people spoke to a range of people - parents, friends and teachers – and current students were seen as an important, specific and unbiased source of information. University open days were also important. Concurring with findings above, location and graduates employment outcomes were also important pieces of information.

Also in finding with other research, the large majority were happy with their decision, although some may have chosen a different university or course if they had been more informed about teaching quality and the number of contact hours.

Both the Moments of Choice study and CFE Research identified what constitutes effective IAG. For the Careers and Enterprise Company effective IAG:

1. Understands the cognitive context of the decision so that the design of advice works with the grain of the intuitive system, and supports good reflective decision making.
2. Is trustworthy.
3. Personalises to the individual and what is meaningful to them.
4. Gives young people agency and is transparent about how their input preferences have led to outputs or advice.
5. Structures information provision so big decisions are broken down into smaller choice sets.
6. Provides information when needed, rather than overloading young people with information that is not salient, relevant or useful to them at that time.
7. Helps influencers (teachers, parents or carers, Careers Advisors) give meaningful advice to young people, and
8. Signposts actions.

An important driver for this format is reducing the cognitive burden or overload on young people, when they have so much information, or options to access information, that they end up making poor decisions.

91 C. Lyonette et al (October 2016), Richer Information On Student Views: Supporting The HESA Review Of Destinations And Outcomes Data. HESA
92 Careers and Enterprise Company (2016) op cit
93 CFE Research (2017) op cit
Many of these facets are included in Figure 13. Young people were provided with a series of statements and asked whether they disagreed or agreed with them. Most young people would like careers information in one place (less so for HE Academic). But a key finding is that young people would like to speak to someone face-to-face, by phone or test, and this is highest amongst those on Technical FE/HE routes. This relates to the availability of personalised IAG, relevant to the individual.

Very few people could not find the information to help them make a decision (<20%); could not find all the information they wanted to make a fully informed decision (<15%) or; were not aware of available IAG (<15%).

**Figure 13** Extent to which agree with statements in relation to making decisions about education and training by route (% who agreed/strongly agreed)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Technical FE/HE</th>
<th>HE Academic</th>
<th>FE Academic</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would have found it easier to make a decision if all the information about the courses and…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer to speak to someone face-to-face to get help with decision-making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know what I want to do when I finish my current course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wanted to study close to where I live</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer to get help with decision-making online</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always knew what I was going to do so I didn’t consider any other options</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It was important to me to earn a wage while studying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did not know which source of information I could trust to give me accurate information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer to speak to someone by phone or text to get help with decision-making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was not aware that there was information, advice and guidance available to help me…</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I could not find all the information I wanted to make a fully informed decision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I did not use the help and resources available but now wish I had</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I didn’t know where to find the information I needed to help me make a decision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I wanted to do the same thing as my friends</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Warwick IER from data in CFE Research (2017)
3.8. (RQ1e) When choosing between HE, FE and apprenticeships what role do the following play: location; outcomes/salary; career pathway/ plan; passion/ personal fulfilment/ career calling

The literature suggests that people develop a view of what they want to be in the future, then work out a path to achieve it, then fill in the details. Therefore, specific details like location come at the end of the process.

As we have seen, both CFE Research and the Behavioural Insights Team developed decision making timelines which show how they see the development of job, career and personal fulfilment. Notions of future aspirations, both personal and career related are developing and evolving throughout a young person’s life. At the Moments of Choice they are compelled to make a decision. Some young people take the option to disengage.

The certainty of young people beyond their current course is lower for those following HE Academic routes than others. 75% of those in the Technical FE/HE route and 73% of those on the FE Academic route agreed or strongly agreed with the statement ‘I know what I want to do when I finish my current course’. This compares with only 38% of those on the HE Academic route. Although this figure is much lower than other HE research.

Higgins et al. (2010) in a study of Foundation degree students found that (on a scale of 1 ‘Clear idea’ to 7 ‘No idea’) 58% of foundation degree students provide a rank of 1 or 2, as did 53% of all HE students. The figures for those scoring 6 or 7 were 5% and 8% respectively.

Therefore it appears that for most students, their routes once chosen, tend to be more certain than not suggesting an evolution of aspiration underpinning their decisions.

Higgins et al asked students why they decided to enter HE. Figure 14 shows that career and job outcomes were paramount in their decision, as a reason and the main reason. Wanting to study a particular course or subject was the fourth most important reason.

94 Careers and Enterprise Company (2016) op cit
95 CFE Research (2017) op cit
96 H. Higgins (August 2010), Students’ experiences of full-time Foundation degrees: A Report to fdf
In Kashefpakdel and Rehill (2018) analysis of the LSYPE future job expectations were also the most important concern. 96% agreed or strongly agreed with the statement that their reason for doing an apprenticeship was that it was ‘a well recognised qualification’. The practical nature of the choice, as well as the ability to work and train at the same time were also important.
Fagence and Hansom asked HE applicants why they did not choose other alternatives. Simply wanting to go to university was the main reason given by four out of five HE applicants in both SEGs. Just over half in both SEGs also provide career choice as a basis for their decision.

University as a lifestyle choice was also found in Partnership for Young London’s study:

“…the most significant contrast between the way in which apprenticeships and university was perceived was in relation to non-academic aspects, like the lifestyle. Young people consistently spoke on non-academic aspects when considering university, from societies, parties, and peers. For some, university represented a rite of passage, into adulthood, and away from parents. Apprenticeships, in the minds of our participants, did not provide a narrative about lifestyle, and the perceived working nature of apprenticeships limited any assumptions that apprenticeships provided a positive opportunity to make friends, meet new people, and grow as a person. As such, apprenticeships were not seen as enjoyable of a choice as university, a view which negative experiences of low pay and unsupportive employers added to.97”

97 Partnership for Young London (2017)
3.9. (RQ1f) How have the factors influencing student choice changed over time? (i.e. before 9k tuition fees vs. under the current system).

3.10. Summary

Overview of decision making:

- Most young people start to think about post16/18 options in Years 9, 11 and 12. They make the final choice in Years 11, 12 and 13.
- However, choices are developed over a longer period so that when young people make a decision, most are clear about what they want to do.
• Most young people stick with these decisions and, with the benefit of hindsight, are satisfied with their decisions.

How do students choose between HE, FE and apprenticeship routes:

• Decision making approaches:
  - There are a number of different theoretical approaches broadly based around economic, sociology and psychology disciplines. Each identifies different intrinsic and external factors as important to the decision. Some stress the role of the individual, others their ‘environment’ whilst others focus on the attractiveness of different options and the ways in which they are presented.

• Key factors when choosing between different routes:
  - **Financial returns.** Generally, the higher the qualification the greater the financial returns, and this makes higher qualifications more attractive. In addition, some qualifications (especially degrees) are now seen as a basic entry point into the jobs market if people want to earn a ‘decent’ salary. The financial benefits of a qualification tend to outweigh the costs (financial and non-financial) of studying for it. These findings tend to apply across different groups of students.
  
  - **Mindset.** Having a particular mindset (such as resilience) is also seen as a basis for making particular choices, such as, pursuing outcomes that an individual aspires to and, generally ‘outperforming’ their wider social group. However, meta analyses have cast doubt on the level of impact.
  
  - **Access to IAG.** Providing people with high quality IAG (including support) is believed to enable them to make ‘better’ decisions. Underlying this view is that options are either presented in a biased way, or not at all, particularly vocational options. Research suggests that young people following technical and academic options use a similar array of IAG, with the former marginally more likely to say that access to information was more of a problem.
  
  - **Socioeconomic group.** Many people believe that the range of options is restricted for those from lower SEGs, and is enhanced for those from higher SEGs. Research generally identifies that those on vocational options and undertaking degrees at non-elite HEIs are from lower SEGs whether that is measured by occupation, FSMs, parents’ highest qualification or area of residence.
  
  - **Prior attainment.** Highest qualification at Year 11 is seen as the best predictor of future outcomes, more so than other individual or environmental characteristics.
  
  - **Gender.** Whilst at the aggregate level academic and vocational options have a more or less even split between men and women, in terms of subjects
studied they are not. There are large gender differences between vocational subjects at apprenticeship and HE level.

- **Barriers and incentives.** A wide range of barriers and incentives have been identified. The larger and more significant the barriers, the less likely an individual is to choose that option. However, barriers and incentives work differently for different people, with the same ones providing motivation for some and challenges for others.

- **Who influences choices.** Parents, schools, careers advisers, peers and employers are all given different weights depending on what age and situation the decision is being made in. As we have seen, the argument tends to be that different people provide varying biases to the decision maker. Bias is also seen to come from different types within these broad groups of people and organisations.

- **Factors influencing ‘marginal’ students.** Few studies focus on students’ decisions at the margin. This is mainly because it is very difficult to identify potential students that would equally benefit from different routes. The previous analysis shows that there are many different factors and influences which converge to form a decision. So it may well be that the importance given to these varying elements does vary at the margins. One study showed that there were significant consequences for those who marginally achieved and did not achieve GCSE English.

- **How do students seek out FE and apprenticeship opportunities and how effective is IAG.** People tend to make the decision first and then seek out information to evaluate that decision. Too much information leads to poor decision making. IAG support can help people reduce this cognitive burden. The main types of information people seek for differing routes is very similar with marginal differences in the top six types of information used. School careers advisers are used but tend not to be important.

- **When choosing between HE, FE and apprenticeships what role do the following play: location; outcomes/salary; career pathway/ plan; passion/ personal fulfilment/ career calling.** The literature suggests that people develop a view of what they want to be in the future, then work out a path to achieve it, then fill in the details. Therefore, specific details like location come at the end of the process. Notions of future aspirations, both personal and career related are developing and evolving throughout a young person’s life. At the Moments of Choice they are compelled to make a decision. Some young people take the option to disengage. Most people tend to be certain about their future aspiration and options and, having made a choice, are happy with that decision.
4. (RQ2) Choices within HE and FE.
This section looks at the choices within FE and HE, which factors influenced choice of provider, course and where to study.

4.1. (RQ2a) Which factors influence students’ choice of: institution; course; mode of study/length of course (full or p/t or accelerated); location (i.e. living at home or leaving home.)

4.1.1. Choice of institution

In their study of FE decision making by students, unemployed people and adult learners, Dickinson et al (April 2009) found that proximity was a major factor in people’s choice of where to study. This was because the choice of course often determined the provider, and thereby the location. If someone wants to pursue a particular career there is often one relevant course, programme or qualification (e.g. an apprenticeship framework or standard) or key qualification (such as a BTEC). The level of mergers within the FE sector means that usually means that there is only one General FE college in an area so the choice of provider is limited. In the few remaining places where there is a choice, sometimes large FE providers will agree to deliver particular programmes so as not to compete for limited student numbers. So one FE provider will deliver construction and another engineering. Whilst there can be many private training providers in one area, many of these are small and the choice of qualification and provider will be the employer’s.

For HE institutions, it is also course provision which is a key factor. Higgins et al (2010) found that ‘it offered the course I want’, was the primary reason for choosing a given institution for both Foundation degree students and other HE students.

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Figure 16 Why did students choose to study at a given institution?

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98 Dickinson et al (April 2009)
100 Work for Northamptonshire LEP in 2015 found there were over 250 FE providers in Northamptonshire County see Ibid.
101 Higgins et al (August 2010) op cit
Fagence and Hansom’s (2018) more recent study also found that the course offered was the main factor, and this was for people from both SEGs.

Location was a more important factor in Higgins et al (2010) for Foundation degree than other HE students, probably because they were more likely to be adults.

Source: Higgins et al (August 2010)
A number of reports highlight the importance of provider open days in encouraging students to attend their institution. CFE Research (2017) found that talking to staff at an open day was the fourth highest source of information, but it was the most helpful especially for HE Academic students (see Figure 6). Higgins et al found (2010) that the visit to the HEI was the second most important factor in choice for both Foundation and other degree students (see Figure 16).

Diamond et al (2012) also reached this conclusion:
One of the most striking statistics to emerge from the 2010 HEFCE report is the large percentage of respondents who rated formal university visits as „very useful“ – a greater percentage than any other source of information covered by the research. This suggests that physically visiting a university plays a particularly valuable and distinctive role. Part of the reason for this undoubtedly lies in the fact that formal open days allow prospective students and their parents to gather more detailed and tailored information. Yet existing qualitative studies of student choice as well as the research conducted for this study show that this is not the sole reason; it is also because personal contact with an institution often leads to the forming of emotional ties between the prospective student and the institution.

Potential students want to know whether a prospective university ‘feels right’.

Universities are well aware of this and they: “…recognised that the open day was the place where, as one staff member put it, prospective candidates stop being simply “candidates on paper” and start to “place themselves” at the institution. As a consequence, concerted efforts had been made to distil the feel good factors into the open day experience”.

A number of studies have focused on the factors underlying choices between ‘higher’ and ‘lower’ status HEIs. Status is often operationalised as the Russel Group/Other Universities, and pre- and post-1992 HEIs. Figure 17 above shows that university reputation (which is defined by the individual) is a greater influence on students from higher SEGs than lower. Figure 16 shows that reputation was ranked similarly high for Foundation degree and other HE students, but for a much higher proportion for the latter.

Anders et al (2017) suggested that subjects chosen at age 14 can influence future pathways. Similarly, Dilnot (2017) examined the relationship between league table score of university attended and A-level subject choices. Dilnot uses a taxonomy of A-levels developed from the published preferences of the Russell Group: ‘facilitating’, ‘useful’ and ‘less suitable’ for university entry. Using linked administrative data for three recent cohorts of English entrants to UK universities Dilnot concludes that: “The results suggest that A-level subject choices are indeed associated with league table score of university attended, with the difference between choosing three facilitating subjects rather than none equating to being at, say, Bristol University rather than Leicester, or Oxford Brookes rather than Gloucestershire. An opposite relationship of similar size exists for ‘less suitable’ subjects. Swapping maths for any other facilitating subject is associated with an additional premium”.

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102 Diamond et al (2012)
103 Ibid.
The author does not believe causal links are at play but rather unobservable factors related to their chances of acceptance at high ranking universities which are unrelated to entry to a particular subject. Many of those in the less useful categories are applied A levels or vocationally oriented.

**Figure 18** Taxonomy of A levels available for teaching 2014/15

<table>
<thead>
<tr>
<th>Facilitating</th>
<th>Useful</th>
<th>More limited suitability</th>
<th>Less effective preparation¹</th>
<th>Non-counting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>Ancient history</td>
<td>Art and design²</td>
<td>Accounting</td>
<td>Critical thinking³</td>
</tr>
<tr>
<td>Bengali</td>
<td>Archaeology</td>
<td>Business studies</td>
<td>Anthropology⁵</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Biblical Hebrew</td>
<td>Classical civilisation</td>
<td>DT: product design (3-D)</td>
<td>Applied art and design (double)</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Biology</td>
<td>Classics</td>
<td>DT: product design (textiles)⁶</td>
<td>Applied art and design (double)</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Computing</td>
<td>DT: systems and control</td>
<td>Applied business (double award)⁷</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Chinese</td>
<td>Cymraeg iath</td>
<td>Drama and theatre studies</td>
<td>Applied business⁸</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Classical Greek</td>
<td>Economics</td>
<td>Electronics</td>
<td>Applied ICT (double award)⁹</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Cymraeg all iath, Welsh second</td>
<td>Economics and business⁴</td>
<td>Film studies</td>
<td>Applied ICT⁶</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Dutch</td>
<td>English language and English literature</td>
<td>ICT⁴</td>
<td>Applied science (double award)⁷</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>English literature</td>
<td>Geology</td>
<td>Media studies</td>
<td>Citizenship studies⁴</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>French</td>
<td>Environmental science</td>
<td>Music technology</td>
<td>Communication and culture⁴</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Further mathematics</td>
<td>Government and politics</td>
<td>Physical education</td>
<td>Creative writing⁴</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Geography</td>
<td>History of art</td>
<td>World development⁶</td>
<td>Dance</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>German</td>
<td>Greek (modern)</td>
<td>Music</td>
<td>DT: food technology</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Gujarati</td>
<td>Philosophy</td>
<td></td>
<td>Engineering⁵</td>
<td>General studies⁴</td>
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<tr>
<td>History</td>
<td>Psychology</td>
<td>Health and social care</td>
<td>Health and social care (double)⁷</td>
<td>General studies⁴</td>
</tr>
<tr>
<td>Human biology⁷</td>
<td>Religious studies</td>
<td>Sociologv</td>
<td>Humanities⁵</td>
<td>General studies⁴</td>
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<tr>
<td>Italian</td>
<td>Sociology</td>
<td>Government and politics</td>
<td>Physical education</td>
<td>General studies⁴</td>
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<tr>
<td>Japanese</td>
<td>Statistics</td>
<td>Leisure studies (double award)⁹</td>
<td>Leisure studies⁵</td>
<td>General studies⁴</td>
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<td>Latin</td>
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<td>Leisure studies⁵</td>
<td>Leisure studies⁵</td>
<td>General studies⁴</td>
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<tr>
<td>Mathematics</td>
<td></td>
<td>Media: comm’n and production⁶</td>
<td>Performances studies⁵</td>
<td>General studies⁴</td>
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<tr>
<td>Modern Hebrew</td>
<td></td>
<td></td>
<td>Performing arts⁶</td>
<td>General studies⁴</td>
</tr>
</tbody>
</table>

¹Applied A-levels marked ¹
²Includes 6 additional endorsements/pathways
³No entries in England/combined with other subject in National Pupil Database marked ¹
⁴Information and communication technology
⁵To be discontinued marked ⁶

Source: C. Dilnot (2017)
4.1.2. Choice of course

The previous section provided evidence that choice of course was important in determining provider. Previous sections have also suggested that choice of course from age 14 onwards influences future options.

Aspirations for future careers and jobs, it has been argued, evolves over time from quite an early age and is sustained. Many young people (between 50%-60%, see Figure 13) do not require any support in making their post-18 decisions because they are clear what they want to do. This provides a helpful heuristic or shortcut within the plethora of information. In deciding which course to undertake at which institution, young people tend to use a variety of information sources and individuals. As far as He is concerned, Lyonette et al (2016) found that: “…prospective [HE] students use a variety of sources of information when making decisions about whether to go to university and if so, what and where to study. Research…has shown that there are limits to the amount of information-processing prospective students can undertake and that more information does not necessarily lead to a more informed decision. The students and graduates appeared predominantly to use sources of information that are well-established and form a ‘core’ of information used by prospective students. Compared to earlier research, there appears to be some increase in the use of social media and blogs, i.e. sources that provided personal experiential information, and a decline in the use of physical prospectuses. Most common sources of information include family and friends, prospectuses and institutional websites, visits to particular HEIs, and information from teachers. Information gained from official sources of raw data tends to be less frequently mentioned, although league tables and other rankings produced from official data by newspapers and university guides feature somewhat more commonly, especially by international students and students with higher entry qualifications”105.

Of course, a major impact on choice of course is gender. Figure 19 shows the percentage point difference between the proportion of women and men on different apprenticeship frameworks/standards in 2014/15. The top twenty apprenticeship frameworks/standards by number of starts were chosen. In all but three of these twenty frameworks/standards is the percentage point difference less than 20pps – Hospitality and catering; Customer service and Accountancy. In 13 of the top 20 frameworks/standards, the percentage points difference is great than 50pps.

105 C. Lyonette (October 2016) op cit
As far as HE is concerned, Platt and Parsons (2017) found that girls had higher expectations of university attendance than boys, and that: “…and that critical in the formation of these expectations was the gender egalitarianism of their mothers”\textsuperscript{106}. This gender egalitarianism did not extend as an influence of the choice of occupation as Figure 20 shows. Very few girls aspired to occupations which employed fewer than 40% women. Similarly boys (even more so) were biased to occupations dominated by their own gender. The choices for both girls and boys were not influenced by individual (apart from gender) or household (including mother’s attitudes and behaviour) characteristics.

\textsuperscript{106} L. Platt and S. Parsons (2017), Is the future female? Educational and occupational aspirations of teenage boys and girls in the UK. Centre for Longitudinal Studies Working paper
4.1.3. Location

No studies were identified that analysed the reasons for choosing different modes of study. This is probably because it is assumed that other commitments, family and work, sufficiently constrain an individual’s options.

As was mentioned above, Dickinson et al (April 2009) found that proximity was a major factor in people’s choice of where to study\textsuperscript{107}. But this tended to be by default. The limited range of choice in the FE sector for individuals (due to mergers and/or agreement of who should deliver which programmes) meant that there was usually only one provider available in reasonable travelling distance.

\textsuperscript{107} Dickinson et al (April 2009)
Proximity is not just a measure of distance but of access. A provider may be closer in mileage, but not on public transport routes. Learners are often reluctant to change buses. In rural areas, having sufficient car parking spaces is also important. In their analysis of HE decisions, Fagence and Hansom (2018) found that location was the least important of a range of factors presented to students. Of a list of 11 factors, when asked how influential they were; ‘located where I can continue to live at home’ was the tenth most important, having some influence on 26% of students and being the major influence on 16%. ‘Being close to friends’ was identified by 18% and 3% of students respectively. However, being closer to home was much more important to students from lower SEGs. Over one third (36%) of those in SEGs C1-E rated being able to live at home as having some influence and 25% rated it as the major influence. This compares with 19% and 10% of students in SEGs AB respectively.

Higgins et al (2010) study asked three location questions. For Foundation degree students, ‘because I could continue living at home’ was an influence to 34% and was the third highest reason. This compared with 23% of other HE students where it was the 11th highest ranked influence.

For other HE students ‘because it is an attractive or interesting place’ was of much more importance, rated by 43% of HE students and ranked as the fourth most influential factor. This compares with 29% of Foundation degree students who ranked it in sixth place.

4.2. (RQ2b) When choosing between courses/pathways what role do the following play: outcomes/salary; passion/personal fulfilment/career calling; signalling (of the value of the qualification)

4.2.1. Outcomes and salary

We have seen how job outcomes and salary play a central role in people’s decision making (see Section 3.3.1). But does this impact on choice of course or institution?

Patrignani et al (2017) found significant differences for some Levels of qualifications when controlling for GCSE attainment (see Figure 6). They also found significant earnings differentials at age 23 for different sub-degree qualifications. Figure 21 shows that earnings differentials are particularly high for Level 4 and 3 vocational qualifications and for Advanced and Intermediate Apprenticeships, but these are higher for males than

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108 Dickinson et al (2009), Evaluation of the impact of Longley Park Sixth Form College
109 Fagence and Hansom (March 2018) op cit.
females. The study also found, in contrast to other studies, that there were also positive returns for lower Level qualifications at Levels 1 and 2 but these tend to be smaller.

However, the authors found that there were also significant gender differentials, and earnings varied by level of GCSE attainment. Given the role of gender and prior attainment on decision making, future employment prospects may indeed play a role in decision making. But it is likely to be a choice amongst constrained options.

Figure 21  Earnings differentials associated with education and training below Level 5


Cavaglia et al (2017) found that gender also played a role in the returns on apprenticeships compared to degrees, and returns on Level 3 options. For men and
women who completed their compulsory education in 2003 (at age 16), the graphs in Figure 22 show the trend in earnings of different options until the age of 28 in 2015. For men the earnings differential of an apprenticeship is higher than the other Level 3 academic and vocational options. But for women level 3 academic qualifications provide higher earnings returns, Figure 21 shows that the returns to women of A levels is the highest of any qualification below Level 5. Further analysis confirms these trends for Level 2 qualifications, although the gaps between the different pathways is less pronounced.

**Figure 22**  Earnings profiles of people whose highest education attainment is at Level 3

Source: Cavaglia et al (2017)
Cavaglia et al (2017) also compare earnings differentials between Advanced Apprenticeships and Degrees for men. In terms of age, advanced apprenticeships provided a higher earnings differential up to and including age 28. However, if years in employment post-education is used rather than age, then the earnings returns of degrees overtakes that of advanced apprenticeships after six years.

This study shows that if analyses identify future earnings returns as important in choosing between different courses and options, they need to control for gender.

CFE Research (2017) found that 57% of students sought information on what previous learners on a course now earned, but this varied by type of route. 48% of FE Academic learners sought this information, compared to 56% of Technical FE/HE and 68% of HE Academic students.

In Fagence and Hansom’s (2018) study of HE students, future earnings potential was the fourth highest ranked influential factor as to where to study. It played some part of the decision for 82% of students and was the major factor (3rd ranked) for 41% of students. Future earnings potential was marginally more important for those form a higher SEG (2-3 percentage points).

4.2.2. Passion, fulfilment and calling

Previous sections suggest that young people evolve a view of their future selves over several years, and this is made more concrete at various decision points, Years 9, 11 and 13 in particular. This is the primary basis for their post-16 decisions.

Few studies have therefore focused on such factors as passion, fulfilment and calling when analysing the factors which people use to decide between providers and programmes. Codiroli Mcmaster did analyse whether differences in students’ choices are driven by differences in their personal attributes, specifically ratings of their own abilities and enjoyment in studying STEM; Social sciences, Law and Business (SLB); and arts and humanities subjects\textsuperscript{110}. Analysing date from Next Steps (formerly the LSYPE), Codiroli Mcmaster used parents highest qualification, and young people’s responses. The author found that: “…students whose parents are more educated are most likely to choose subjects for intrinsic reasons. to questions about how much they enjoyed or were good at various subjects, as the independent variables”. The author concluded:

“Students whose parents had higher levels of education were both more likely to choose arts and humanities subjects, and less likely to choose social sciences, law or business, compared to students whose parents had lower levels of education. The study also

\textsuperscript{110} N. Codiroli Mcmaster, N. (2017). What role do enjoyment and students’ perception of ability play in social disparities in subject choices at university? Centre for Longitudinal Studies.
confirmed findings from the psychological literature, showing that students from a range of social backgrounds were most likely to choose subjects they thought they were good at and enjoyed…Recent research into the efficacy of these interventions suggests that for all students attitudes are difficult to manipulate, and it is more effective for practitioners to foster students’ knowledge of positive outcomes associated with studying STEM. This study presents support for the argument that for many students, attitudes to science and maths are not the key issue.111"

Brown and Bimrose112 present a model of career learning wherein individual’s narratives develop. Learning can be undertaken to access different opportunities, and the extent to which this is of importance will, as we have seen, vary between different groups of people. But learning, according to these authors, is a process of development in terms of their own identity, and the interaction of that identity with life and work. Enjoyment, personal fulfilment, challenge, status are all important factors, but these will vary between individuals, and within individuals at different points in time. This may be why young people are attracted to HE, because it offers opportunities for emotional development and relational development: exposure to new perspectives etc.

This highlights the challenge of understanding the decision making process in terms of learning and skills, and careers and labour market opportunities. Large quantitative studies can (and have) been able to differentiate groups of people depending on their SEG, parental background, type of school attended, prior attainment and gender. But these groups contain a wide range of people. Qualitative studies provide a much more nuanced understanding within these processes across a wide range of factors which influence decisions. Perhaps that is why there is so much demand amongst young people for face-to-face, phone or text contact with an independent adviser, and why personalised support is seen as very important.

111 Ibid.
4.3. Summary

Which factors influence students’ choice of:

- **Choice of institution.** For FE learners, proximity is an important factor in determining where to study. This is because choice is usually very limited. Either the employer decides or there is only one provider in the area. For HE, whether the institution delivers the course the student wants to study is the primary factor. However, for adult HE students, distance is also likely to be the most influential factor. Open days are very influential also.

- **Choice of course.** Many young people do not require any support in making their post-18 decisions because they are clear what they want to do. A major influence on this developing view is gender.

- **Location.** Location is important for FE students and adults in HE, but not for young HE students.
When choosing between courses/ pathways what role do the following play: outcomes/salary; passion/ personal fulfilment/career calling; signalling (of the value of the qualification):

- **Outcomes and salary.** Job outcomes and salary play a central role in people’s decision making, however, as indicated above, gender is a key determinant of course. Earnings differentials from different broad routes vary between men and women, and vary over time.

- **Passion, fulfilment and calling.** These factors will strongly influence people’s choices as they evolve through childhood. Young people will study subjects they are good at and enjoy.
5. (RQ3) Finance.

This section focuses on finance, how information about finance influences choices, and the extent to which finance influences decisions depending on different countries’ funding systems.

5.1. (RQ3a) How does the available information about finance (e.g. relating to fees, loans, bursaries, accommodation rates etc.) influence the choices students make?

CFE Research found that information about the earnings of previous learners was more important than how much the course cost and whether there was financial support available. This was for all of the routes students chose. Generally, students ranked information about earnings as the 7th most important followed by cost (8th) and then support (10th). Students found information about the cost of and financial support available for the programme easier to locate than information about earnings. For example, 88% of those on the HE Academic route found information about cost easy or very easy to get hold of. 71% of the same group found information about financial support easy/very easy to access and 65% found earnings data easy/very easy to access.

Generally, financial information and data about education and training options is easy to access. Dickinson et al (2010) found that, for FE provision, providers usually take a blanket approach in sending out financial information to all applicants whether they are likely to access financial support or not. Some providers may target particular learners, for example, students on dance and drama courses because they are more likely to be living away from home.

In their evaluation of advanced learner loans, IFF (May 2016) found that awareness about funding support came after the decision to study. At this point, 36% of loanees and non-loanees were aware of advanced learner loans. Over half of all learners sought information on funding (54%) and this was higher for eventual loans learners 64%) than non-loans learners (41%). There was a similar conclusion in Dickinson et al’s evaluation of Career Development Loans (CDL), people made the learning decision and then sought

113 P. Dickinson et al (2010), Research into automated access to information about learner financial support. LSC National Office.
114 IFF (May 2016), Evaluation of 24+ Advanced Learning Loans: An assessment of the First Year BiS Research Paper Number 263
ways to finance it\textsuperscript{115}. Information about CDLs tended to come from the providers themselves.

Learners used a range of sources to find out about funding for their programme and was, again, similar for loanees and non-loanees. Providers were far and away the most important sources of information for loanees (67\%) and non-loanees (65\%), followed by Gov.uk website (22\%/15\%) and the internet (13\%/17\%).

Figure 24 shows that two thirds of loans learners (66\%) who sought out information on funding their study found that information easy/very easy to source. This proportion fell to 58\% for non-loans learners.

Awareness and take-up of loans varied depending on a range of factors – prior attainment and work status. This suggested that non loans learners had more savings and earnings and were able to self-fund themselves. Attitudes to debt and savings did not affect individual’s loans take-up. However, older people were much less likely to take-up a loan.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure24.png}
\caption{Ease of sourcing funding information about advanced learner loans}
\end{figure}

\begin{footnotesize}
\begin{figure}
\centering
\includegraphics[width=0.8\textwidth]{figure24.png}
\caption{Ease of sourcing funding information about advanced learner loans}
\end{figure}
\end{footnotesize}

Source: IFF (May 2016)

5.2. (RQ3b) What is the impact of the funding system on choice in other developed countries?

5.3. Summary

- How does the available information about finance influence the choices students make? Information about future earnings was more important to learners than details of course costs and the availability of financial support. As with several other factors, people make the decision to pursue a particular learning option and then evaluate the best way of achieving it. However, information about earnings is more difficult to access than costs and support. Providers are a key source of information about costs and support.
6. (RQ4) Mature students

This section focuses on mature students and whether their decisions, and the content of those decisions are in any way different from those of young people.

6.1. (RQ4a) Which factors shape mature students’ choices?

The decision making process for older people is much different to that of younger people. They are much less likely to frame or make the decision about engagement in learning and skills on their own. Other organisations, primarily employers and Jobcentre+, are much more likely to take the lead in those decisions.

6.1.1. People as individuals

Previous sections have shown that, when the individual is the prime decision maker, adults tend to prioritise location much more than younger people. This is because of their other commitments to family and work. But in most respects, adults will go through a similar process. For whatever reason, whether it is to improve their labour market prospects, return to work, support their children’s education or for pleasure, the decision to engage will evolve over time. And then practical decisions (which provider, can I afford it?) will manifest themselves, and barriers and incentives can be evaluated.

R. Gloster et al behavioural approaches to adult decision making processes\textsuperscript{116}. People accessed and utilised a range of support of which family and friends were the most important. However, these could be discouraging as well as encouraging. Adults tended to use the internet to access information, in the main it was used to find and apply for jobs. The internet was not just a source of information but also support, adults were happy to communicate with on-line advisers and use internet based tools (eg CV builders. In all: “Most users were positive about the internet in supporting career decisions as it was something in their control that could be accessed at the right time and pace for them. However there were some concerns around the reliability and currency of the data, and that using the internet effectively required both technical and research skills”\textsuperscript{117}.

Only a small number of interviewees in the study used formal careers services. Some of these people had used the National Careers Service (NCS) although many were unaware that it was the NCS they were using, or what the full range of NCS support was that they could access. Respondents tended to receive employability type support, when what they really wanted was: “…support in helping them to make sense of their

\textsuperscript{116} R. Gloster et al (September 2013), Adult career decision-making: qualitative research. BIS
\textsuperscript{117} Ibid.
opportunities and constraints, and to develop an understanding of their interests and preferences”.

The authors developed a typology of decision making styles:

- **Strategic**: Reflective about self; systematic; seeking out information and consulting others; deliberate weighing up of factors influencing the decision.

- **Exploratory**: Reflective after periods of experience; testing ideas through experience; evaluating how they feel about experiences; can be pro-active in looking for opportunities.

- **Opportunistic**: Reactive; responding to opportunities; often taking opportunities pointed out by others

- **Impulsive**: Emotional; instinctive; often taking very quick decisions with little or no thought about real options or the consequences of decision.

- **Passive**: Laid back; drifting; reacting to choices presented; strongly influenced by others in their choices.

A key difference in the decision making and choices of adults compared to young people, is that adults’ moments of choice are much less predictable, and can be prompted by uncertain events: being made redundant, health issues, bereavement, promotion, changes in caring responsibilities etc. Figure 25 puts these decision making typologies in a wider context.

![Figure 25: Overview of adult career decision-making styles](source: R. Gloster et al (September 2013))
The two axes represent the extent to which people look outwards towards the world of work and learning, and the extent to which they follow their own interests and preferences. The two are not mutually exclusive. The diagram also includes personal, labour market, sociological and psychological constraints (though strangely these are not treated as drivers and/or motivators).

In many ways, Figure 25 is similar to the socio-ecological approach in Section 3.2.5. The aspirations and intentions of people evolve over time from the confluence of a range of internal and external factors. In some people they prompt action in which they access a range of support and information as previously described. People also have a range of socio-psychological resources at their disposal which they can apply to evaluating the range of options. The process evolves narrowing options and making them more or less concrete, until a decision is made.

6.1.2. Adults in HE

Table 3 showed the decline in some categories of HE learners, particularly part-time students. The Independent Commission on Fees (ICOF) found that the decline in adult (those aged 20-24 and 25+) applications 2012-13 was driven by a large fall in England. The figures for both age groups in Northern Ireland grew, remained static in Wales, and grew overall in Scotland. ICOF concluded that this was because of the increase in tuition fees in England.

Mature HE students differ from younger students in that they have different qualifications on entry. Almost nine out of ten (86%) young students have A levels as their highest qualification, compared to 29% of mature students. Two out of five mature students (40%) already hold an HE or professional qualification, whilst a further 9% have completed an Access course. 57% are from the highest NS-SEC groups, but over one third are from semi-routine and routine occupations.

The findings across all mature students is similar to that found by Higgins et al (August 2010). Adult students main reasons for choosing their HEI was because it offered the course they want to study, and location. The availability of flexible study options was third most important (this study was undertaken before the fall in part-time students). Whilst almost half of mature students sourced their information from UCAS, 40% did not consult any information sources. ‘Interest in my subject’ was the primary motivating factor (57%), followed by ‘to get a more fulfilling job (44%), improve my earning potential (41%), and to change my career (35%).

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118 Independent Commission on Fees (September 2013), Analysis of university applications for 2013/2014 admissions
119 D. McVitty and K. Morris (May 2012), Never Too Late To Learn: Mature students in higher education. million+ and National Union of Students (NUS)
6.1.3. People in employment

Analysis of the Labour Force Survey shows that older people are much less likely to participate in job related training than younger people. Figure 26 shows that in 2017 there was a consistent (if slight) decline in the level of training in each age group, the rate of decrease becomes more pronounced after 54 years of age\textsuperscript{120}. However, levels of involvement in training are around the 25\% mark for most age groups. Between 2010 and 2017, the level of training declined in every age group, apart from those aged 55+.

For older people, there is much less financial incentive to engage in training. The wage returns to qualifications decline significantly after the age of 25. Also, additional qualifications add little to an individual’s chances of gaining employment, compared to their work experience\textsuperscript{121}. However, for people with less work experience qualifications are likely to be more valuable.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure26.png}
\caption{Percentage of people who participated in training in 2017 and 2010, by age group}
\end{figure}


\textsuperscript{120} D. Luchinskaya and P. Dickinson (Forthcoming), Adult Skills: Who gets invested in and how has this changed over time? Social Mobility Commission.

\textsuperscript{121} A. Bhutoria (September 2016), Economic Returns to Education in the United Kingdom.
A key feature of apprenticeships over the past decade has been the increase in adult starts. However, over the past five years (2011/12 to 2015/16) the age profile of apprentices has remained fairly stable. In 2015/16, 26% of apprentice starts were made by 16-18 year olds, 30.2% by 19-24 year olds, and 44% of those aged 25+\textsuperscript{122}.

However, the prime mover and funder of job related training in general, and apprenticeships in particular, will be the employer. People working in large organisations, the public sector, in managerial, professional, associate professional and technical, and personal service occupations are the most likely to be involved in training. Occupational training is also be highly related to gender\textsuperscript{123}.

In their study of advanced apprentices, Smith et al (2015) found that the progression rate to HE of adults was half that of younger apprentices\textsuperscript{124}. The progression rate for 25+ apprentices peaked at 7% for the 2006-07 cohort dropping to 5.7% for 2010-11 apprentices. The progression rate for 17-19 year old apprentices in 2008-09 peaked at 15.8% dropping to 12% for 2010-11 young apprentices.

If advanced apprentices did progress to HE this happened several years after completing the advanced apprenticeship. They were also likely to study HE at an FE College.

DWP tried different approaches to encouraging adults in low paid work (75,000 Tax Credit recipients) to seek support from the NCS helpline. Different letters were sent out, and some received a text message. There were no statistical significant differences in the take-up of advice between the three letters, but the additional text message did impact. The main differentiating factor for those who did and did not take-up the advice was relevance. Those who did not take-up the offer: “…either did not understand what was being offered, did not see the offer as relevant to them or were not interested in career progression at the time or at all, typically because they were content with their work situation or considered themselves ‘too old’ to progress”.

Those who did take-up the offer were already considering progressing in work, or were interested in doing so. The two groups did not differ by socioeconomic, demographic, or labour market characteristics. NCS advisers reported that people who contacted them because of this trial tended to be less varied than usual callers who spanned the full range of the working population. Those who took up the trial were in ‘middling’ age and income groups, in lower skilled jobs and with lower qualifications. They also tended to be less further developed in their employment goals, and lacking in confidence and motivation.

\textsuperscript{122} Department for Education (2018), Apprenticeships demographics data tool: starts 2011/12 to 2016/17. FE data library: apprenticeships
\textsuperscript{123} D. Luchinskaya and P. Dickinson (Forthcoming) op cit
\textsuperscript{124} S. Smith et al (September 2015), Progression of Apprentices to Higher Education – 2nd Cohort Update
6.1.4. People not in employment

DWP’s Six Month Offer mandated claimants to choose one of four options: an employment voucher to give to a potential employer, advice on self-employment, a volunteering placement or work-focused training. The options were offered to different numbers of unemployed people depending on their profiles. For example, more qualified people were less likely to receive the training offer. Take-up of the training option was second behind the employment voucher.

Take-up of the training offer was marginally more likely for those aged 18-24 (32%) than those aged 25-49 (29%), which was higher than those aged 50+ (25%). Older learners were much more likely than younger ones to undertake the training in order to gain new skills or update existing ones. It was the highest ranked reason for those aged 25-49 (45% gave this reason) and 50+ (46%) compared to 18-24 year olds (32%)\(^\text{125}\). This supports findings from a number of studies that the primary motivating factor for unemployed people in undertaking training is to get a job.

In their study of approaches used by UK online centres, Dickson and Frearson that engagement with hard to help learners on the individual’s terms was very important\(^\text{126}\). Engagement was primarily through organisations working with the target hard to reach groups (e.g. a women’s refuge). This was the first step in developing a trusted relationship. Getting the atmosphere, communication and contact was also important in order to make learners feel comfortable, many of whom would not have undertaken education and training since leaving school. Basic skills and ICT courses were the most popular.

Gloster et al applied behavioural insights to claimants’ decision to train\(^\text{127}\). The authors used the COM-B framework which: “…depicts behaviour as a system in which capability, opportunity, and motivation interact to generate behaviour that in turn influences each of these components”. There are critical moments when claimants are receptive to training: the initial assessment when they first sign-on; through ongoing adviser support when the person is unable to find work; and if they have positive experiences from undertaking training that is job oriented and relevant to them.

The last point is important. Claimants were open and willing to train: “…particularly if they perceived that the training opportunity was a good fit with their skills and experience and would add value by helping them to work towards their employment goals”. The

\(^{125}\) L. Adams et al (2010). Six Month Offer Evaluation: A report on quantitative research findings. DWP.


\(^{127}\) A. Dickson and M. Frearson (2007), Engaging the hardest to reach what works at UK online centres. LSDA

R. Gloster (July 2017), Using behavioural insights to examine benefit claimants’ approaches to training opportunities
study also found that Jobcentre Plus advisers were frequently used as a source of information about training provision\textsuperscript{128}. The study found that mandated learners tended to be directed to employability courses (e.g. CV writing) whereas self-referred claimants tended to undertake vocational courses.

As far as motivation is concerned, conditionality and mandation are key elements. A claimant's capability (their individual's skills, experiences and work goals) need to be taken into account and this is where adviser support and understanding is required as they perform a gatekeeper role to training opportunities:

“The motivations for training are complex and personal. Claimants react to mandation to training differently. For some it does not affect their planned behaviour and they continue to train. For others it can create a sense of anxiety that overshadows their learning experience. Mandation changes the nature of the interaction, and it made some claimants more defensive or dismissive of the training opportunity”\textsuperscript{129}.

It is a fine balancing act because positive experiences of training encourage people to undertake more training. And this is critical in getting disadvantaged learners, many of whom will have negative attitudes to education and training, on to a positive and progressive path.

6.2. (RQ4b) In which ways do these factors impact on mature students in the following groups those: from disadvantaged backgrounds; seeking to retrain; who previously pursued an FE or level 4/5 route and go back to HE?

6.3. Summary

Which factors shape mature students' choices?

- Unlike younger people, older people are more likely to have other organisations (their employer and Jobcentre+) heavily involved in their education and training decisions.

\textsuperscript{128} Ibid.
\textsuperscript{129} Ibid.
• Like younger people, they access a wide range of information and support. Friends and family tend to be heavily involved. Location is a much more important factor to adults due to their family and work commitments.

• Like younger people, aspirations, choices and intentions evolve over time. But adults’ moments of choice are much less predictable.

• Adult participation in HE appears to have been significantly affected by the increase in tuition fees. Part-time student numbers especially have declined.

• Subject and location underpin most adults’ choice of HEI. Interest in the subject, but also earnings and careers are the main motivating factors.

• Employers are the major decision maker for people in employment. Adult apprenticeships have increased significantly over recent years.

• Adults can be encouraged to seek support, even if their aspirations are not fully formed. But it has to be relevant.

• Jobcentre+ advisers play an important role in supporting unemployed people into work related training. Claimants tend to be positive about training. However, the role of conditionality in decisions means that they need to take a balanced and informed approach to the use of mandation, and the type of training.
6. Conclusions

Overview of decision making:

- Most young people start to think about post16/18 options in Years 9, 11 and 12. They make the final choice in Years 11, 12 and 13.
- However, choices are developed over a longer period so that when young people make a decision, most are clear about what they want to do.
- Most young people stick with these decisions and, with the benefit of hindsight, are satisfied with their decisions.

How do students choose between HE, FE and apprenticeship routes:

- Decision making approaches:
  - There are a number of different theoretical approaches broadly based around economic, sociology and psychology disciplines. Each identifies different intrinsic and external factors as important to the decision. Some stress the role of the individual, others their ‘environment’ whilst others focus on the attractiveness of different options and the ways in which they are presented.

- Key factors when choosing between different routes:
  - **Financial returns.** Generally, the higher the qualification the greater the financial returns, and this makes higher qualifications more attractive. In addition, some qualifications (especially degrees) are now seen as a basic entry point into the jobs market if people want to earn a ‘decent’ salary. The financial benefits of a qualification tend to outweigh the costs (financial and non-financial) of studying for it. These findings tend to apply across different groups of students.
  - **Mindset.** Having a particular mindset (such as resilience) is also seen as a basis for making particular choices, such as, pursuing outcomes that an individual aspires to and, generally ‘outperforming’ their wider social group. However, meta analyses have cast doubt on the level of impact.
  - **Access to IAG.** Providing people with high quality IAG (including support) is believed to enable them to make ‘better’ decisions. Underlying this view is that options are either presented in a biased way, or not at all, particularly vocational options. Research suggests that young people following technical and academic options use a similar array of IAG, with the former marginally more likely to say that access to information was more of a problem.
  - **Socioeconomic group.** Many people believe that the range of options is restricted for those from lower SEGs, and is enhanced for those from higher SEGs. Research generally identifies that those on vocational options and
undertaking degrees at non-elite HEIs are from lower SEGs whether that is measured by occupation, FSMs, parents’ highest qualification or area of residence.

- **Prior attainment.** Highest qualification at Year 11 is seen as the best predictor of future outcomes, more so than other individual or environmental characteristics.

- **Gender.** Whilst at the aggregate level academic and vocational options have a more or less even split between men and women, in terms of subjects studied they are not. There are large gender differences between vocational subjects at apprenticeship and HE level.

- **Barriers and incentives.** A wide range of barriers and incentives have been identified. The larger and more significant the barriers, the less likely an individual is to choose that option. However, barriers and incentives work differently for different people, with the same ones providing motivation for some and challenges for others.

  - **Who influences choices.** Parents, schools, careers advisers, peers and employers are all given different weights depending on what age and situation the decision is being made in. As we have seen, the argument tends to be that different people provide varying biases to the decision maker. Bias is also seen to come from different types within these broad groups of people and organisations.

  - **Factors influencing ‘marginal’ students.** Few studies focus on students” decisions at the margin. This is mainly because it is very difficult to identify potential students that would equally benefit from different routes. The previous analysis shows that there are many different factors and influences which converge to form a decision. So it may well be that the importance given to these varying elements does vary at the margins. One study showed that there were significant consequences for those who marginally achieved and did not achieve GCSE English.

  - **How do students seek out FE and apprenticeship opportunities and how effective is IAG.** People tend to make the decision first and then seek out information to evaluate that decision. Too much information leads to poor decision making. IAG support can help people reduce this cognitive burden. The main types of information people seek for differing routes is very similar with marginal differences in the top six types of information used. School careers advisers are used but tend not to be important.

  - **When choosing between HE, FE and apprenticeships what role do the following play: location; outcomes/salary; career pathway/ plan; passion/ personal fulfilment/ career calling.** The literature suggests that people develop a view of what they want to be in the future, then work out a path to achieve it, then fill in the details. Therefore, specific details like location come at the end of
the process. Notions of future aspirations, both personal and career related are developing and evolving throughout a young person’s life. At the Moments of Choice they are compelled to make a decision. Some young people take the option to disengage. Most people tend to be certain about their future aspiration and options and, having made a choice, are happy with that decision.

Which factors influence students’ choice of:

- **Choice of institution.** For FE learners, proximity is an important factor in determining where to study. This is because choice is usually very limited. Either the employer decides or there is only one provider in the area. For HE, whether the institution delivers the course the student wants to study is the primary factor. However, for adult HE students, distance is also likely to be the most influential factor. Open days are very influential also.

- **Choice of course.** Many young people do not require any support in making their post-18 decisions because they are clear what they want to do. A major influence on this developing view is gender.

- **Location.** Location is important for FE students and adults in HE, but not for young HE students.

When choosing between courses/ pathways what role do the following play: outcomes/salary; passion/ personal fulfilment/career calling; signalling (of the value of the qualification):

- **Outcomes and salary.** Job outcomes and salary play a central role in people’s decision making, however, as indicated above, gender is a key determinant of course. Earnings differentials from different broad routes vary between men and women, and vary over time.

- **Passion, fulfilment and calling.** These factors will strongly influence people’s choices as they evolve through childhood. Young people will study subjects they are good at and enjoy.

- **How does the available information about finance influence the choices students make?** Information about future earnings was more important to learners than details of course costs and the availability of financial support. As with several other factors, people make the decision to pursue a particular learning option and then evaluate the best way of achieving it. However, information about earnings is more difficult to access than costs and support. Providers are a key source of information about costs and support.

Which factors shape mature students’ choices?
• Unlike younger people, older people are more likely to have other organisations (their employer and Jobcentre+) heavily involved in their education and training decisions.

• Like younger people, they access a wide range of information and support. Friends and family tend to be heavily involved. Location is a much more important factor to adults due to their family and work commitments.

• Like younger people, aspirations, choices and intentions evolve over time. But adults’ moments of choice are much less predictable.

• Adult participation in HE appears to have been significantly affected by the increase in tuition fees. Part-time student numbers especially have declined.

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