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1. Executive Summary

1.1. Background

School-mediated support is particularly important for those from lower socio-economic backgrounds as it helps expose students to a range of people, jobs and career options¹ and challenges class-based stereotypes². With the support of JPMorgan Chase, The Careers & Enterprise Company (CEC) commissioned the Behavioural Insights Team (BIT) to develop evidence of how career support, that sits with (mainly) students from disadvantaged backgrounds, can be improved to better support their educational and employment outcomes.

- Complexity of post-16 choices; this group are more likely to select technical pathways which have a vast and confusing option set, and experience 'career confusion', whereby career goals are misaligned with attainment or experience.
2. Opportunity, i.e. the physical and social environment that enables the behaviour.

-

- **Self-efficacy:**





3. Methodology

With the support of JPMorgan Chase, The Careers & Enterprise Company commissioned the Behavioural Insights Team (BIT) to collate evidence from the academic and research literature, with insights from stakeholder consultation events, to explore the following research questions:

1. What indicators can be used to identify socio-economically disadvantaged young people aged 14-17 to target with additional career support?
2. What are the range of barriers (e.g. attitudinal, behavioural, practical) to using career support to achieve positive career destinations that are exacerbated by a young person's economic disadvantage?
3. What are the needs of this cohort at points of transition in their educational career?
4. What are the principles of career intervention activities (or ways of delivering activities) that work to address the needs and obstacles of disadvantaged young people?

3.1. Literature review

This report includes insights and findings from 46 academic research papers, including seven systematic review papers. Google Scholar was used to identify peer reviewed publications that would inform the research questions. Only papers that relate to career support with young people (aged up to 24) were included. Whilst research papers with disadvantaged or underrepresented groups were prioritised, papers that featured high quality evaluations (i.e. those that used robust quantitative methods) and focused on improving transitions to education or employment among young people more generally were also included, where they could potentially inform the design of future interventions. Studies from outside the UK were also included (13 international studies in total). See Table 1 and 2 for a breakdown of papers by age-group and evaluation method.

Table 1. Breakdown of papers by age group

Age group	% of papers
Up to 14 years old (before year 10)	17%
14 - 15 years old (years 10 - 11)	26%
16 - 24 years old	40%
Multiple ages included (pre 14-24 years)	17%

Table 2. Breakdown of papers by evaluation method

Evaluation method	% of papers
Only qualitative methods (e.g. interviews)	13%
Mixed qualitative and quantitative methods	56%
Quasi-experimental designs (QEDs)	16%
Randomised control trial	15%

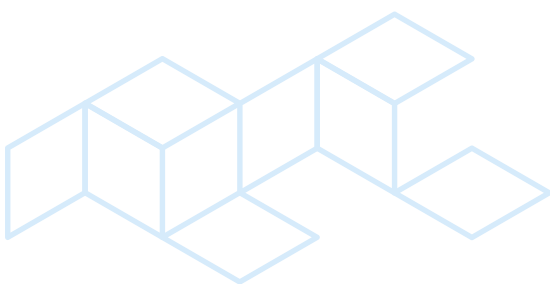
In general, the literature search reveals that career education and support is an area that has not been widely empirically investigated. The paucity of existing evidence has required us to infer insights and identify 'best practice' principles from a relatively select number of papers.

Whilst this helps to understand the types of approaches that show promise, it also demonstrates a need to advance the evidence base and further understand what works.

3.2. Consultation events

In December 2020, BIT and The Careers & Enterprise Company held four regional consultation events covering the West Midlands, Dorset, London and Greater Manchester, to offer geographic spread. These events, conducted online, were designed to gather insights from those involved in delivering careers support. There were approximately 30 attendees in total, and they included representatives from Local Enterprise Partnerships, Career Hubs, and schools (including Careers Leaders and Headteachers). The events were structured to explore the following key themes:

- a. Indicators currently used to identify disadvantaged young people for the targeting of careers support, and any issues associated with this.
- b. Barriers that young people from disadvantaged backgrounds face in using career support to achieve positive education and employment destinations, particularly at transition points. These barriers were identified using the COM-B Model of behaviour change,¹⁶ which breaks down the factors that influence a behaviour into three categories:
 - Capability, i.e. the skills or capacity required to perform a behaviour.
 - Opportunity, i.e. the physical and social environment that enables the behaviour.
 - Motivation, i.e. the reflective and automatic processes that drive the behaviour, including both conscious and unconscious decision making.
- c. Intervention ideas to overcome these barriers and support disadvantaged young people to achieve positive education and employment destinations. We asked attendees to share interventions they had found, in their experience, to be effective, and to brainstorm innovative approaches to overcome the identified barriers.



¹⁶ Michie, S., van Stralen, M.M. & West, R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Sci* 6, 42 (2011).

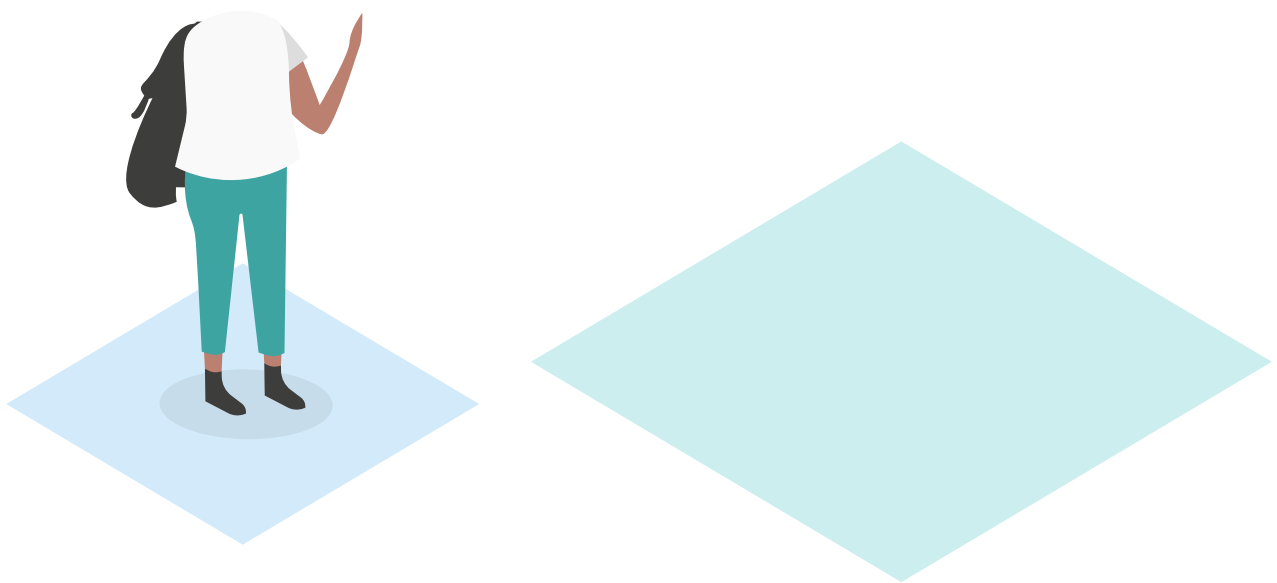
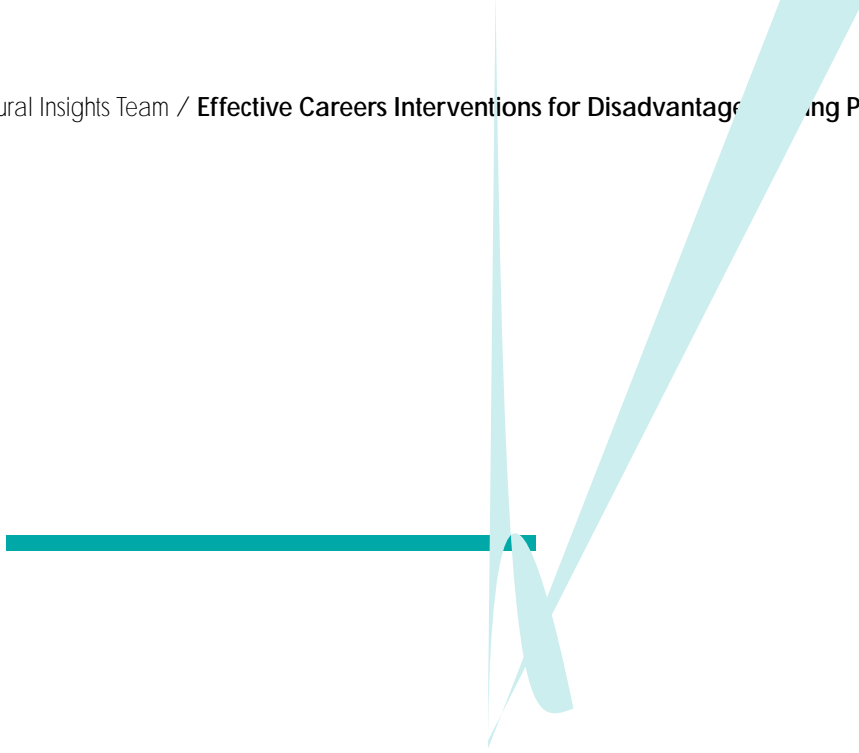


Table 3. Additional indicators of disadvantage

Indicator	Description
Involvement of social services	Involvement of social services is an indication of challenges faced by the young person and affects risk of becoming NEET.
Exclusions and/or persistent absence	Young people who are excluded from school and/or have a chronically poor attendance are at higher risk of becoming NEET.
Low attainment	Low attainment restricts a young person's options and can make it harder to progress to a positive destination. Affects risk of becoming NEET.
EHCP/SEND	Some young people with Education and Health Care Plans, or young people eligible for SEN support, are at higher risk of becoming NEET and could benefit from targeted careers support.
Educated outside of mainstream school	Consultation event attendees noted that home-educated students are more likely to receive insufficient careers support and that special efforts should be made to reach them. Attendees also noted the greater need of young people in Alternative Provision. Being educated away from a school premises can affect the risk of becoming NEET.

Many attendees also indicated that they often rely on the professional judgement of practitioners (typically school staff members) who know the young person to assess disengagement and refer students for further support. Whilst this approach is less standardised and open to potential bias (as discussed in section 5.2.1.), it was thought that practitioners who know young people are best placed to identify those who are at risk of not making a successful transition in the absence of targeted provision.

Consultation event attendees also discussed the impact of demographic characteristics, such as ethnicity and gender, on the barriers a young person faces and the likelihood of them attaining certain positive destinations. Several attendees acknowledged that gender role socialisation plays a powerful role in career aspirations and choices. A number of attendees commented that ethnicity can affect the barriers that a young person faces. For example, some groups (e.g. white boys from low SES backgrounds) are more likely to face barriers relating to attainment in school, while some ethnic minority groups do well at school but then face barriers in achieving positive employment outcomes.



4.2. Challenges with targeting

Many consultation event attendees expressed concerns around visibly singling out disadvantaged students for additional careers provision. These concerns centred around the stigma associated with being considered to need special support, which can undermine a student's wellbeing and compromise their willingness to engage with that support.

Approaches currently taken that circumvent this issue include:

- Targeting at the school/geographical level (but this is not fine-tuned to individual need)
- Providing universal offers, but prioritising disadvantaged young people for early access (for example, schools scheduling interviews for disadvantaged pupils first)

4.3. Findings from the rapid evidence review

The literature mirrors that of the consultation events, whereby FSM is used widely as a key indicator of socioeconomic disadvantage within research and government policy. It is important to note there are some restrictions with using FSM as a proxy for disadvantage; most notably that it is a binary decision, so there may be young people just above the threshold who still face considerable disadvantage. The number of eligible students also shifts depending on current benefit rules and the economic environment. The latest official figures from the government show that the percentage of students on FSM increased from 15.4% in 2019 to 17.3% in 2020 (1,440,788 students), following the onset of the pandemic.¹⁹ This is likely to further widen the variety of backgrounds of young people receiving FSM.

The literature mentions many of the additional indicators identified by the consultation event attendees, along with area level measures, such as IDACI score (income deprivation affecting children index, which measures in a local area the proportion of children under the age of 16 that live in low income households) and Index of Multiple Deprivation (a measure used to classify the relative deprivation of small geographical areas).

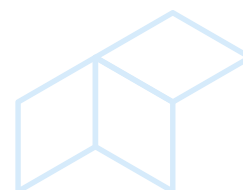
Key considerations

Insights from the literature and consultation events suggest that FSM status is the most readily available individual-level indicator for identifying socio-economically disadvantaged young people for targeted career support. This is based on household receipt of employment-related welfare benefits.

However, in isolation, this measure may not be sufficient to identify those most in need of preventative support to reduce a student's chance of becoming NEET. A number of other indicators can be used to try to predict need for more intensive interventions, but consultation event attendees were most confident in the judgement of practitioners (typically school teachers), who know the young person, to identify needs on an individual case basis.

Where provision is targeted at students with particular characteristics, it is important to mitigate the potential for stigma. One way to achieve this is to provide universal offers, but to design them specifically to speak to the barriers and needs of disadvantaged young people. These barriers are discussed in detail in the following section.

¹⁹ Gov UK (2021). [Schools, pupils and their characteristics. Academic year 2019/20.](#)



5. Barriers to using career support to achieve positive career destinations

This section outlines barriers that young people from disadvantaged backgrounds face in relation to using career support to transition to positive employment and education outcomes. Whilst the primary focus is on barriers to using career support, some of the structural barriers that may inhibit this cohort in the labour market are discussed in section 5.4.

The barriers have been identified as a result of a review of current literature and insight from the consultation events and are presented in relation to the COM-B model; a theoretical model that aids understanding habit

5.1.2. Complexity of post-16 choices

Qualitative research suggests that career choices place a high burden on young people's cognitive capacity, as they encounter a high volume of information and struggle to reliably compare options.²³ This is likely to be particularly pronounced for individuals from disadvantaged backgrounds who make up a disproportionately large number of students pursuing technical and vocational pathways. Recent estimates suggest that FSM students make up only 16.7% of students in Key Stage 5 (16-18 years) academic pathways in comparison to 28% on vocational pathways.²⁴ The range and variability of technical options available make these pathways more difficult to navigate,²⁵ although current reforms to technical qualifications should help to improve this. It is worth noting that post-16 decisions tend to be considerably more complex for 'lower attainers' (those who do not achieve grade 4 in both English and maths GCSEs at the end of Key Stage 4). These students have more restricted options and are less likely to stay in their own school's sixth form than for their higher attaining peers; disadvantaged young people are over-represented amongst 'lower attainers'.²⁶

Lack of information can also lead to some students showing 'career confusion', whereby their career goal does not align with their education background.²⁷ The complexity of various pathways means that some students may drop certain subjects at GCSE and not realise the limiting impact that can have on their future options. This misalignment, whereby students plan to undertake less education than required for their chosen profession, is more common in disadvantaged students. OECD PISA data collected from 2018, suggested that nearly 40% of disadvantaged UK students surveyed, who wanted a professional or managerial career, had no plans to complete any tertiary education. This was in comparison to 10% of advantaged students.²⁸

The complexity of navigating post-16 options, combined with reduced cognitive bandwidth (due to competing pressures) and more limited informal support (as discussed in section 5.2.2.1.) may lead to greater disengagement. Indeed, attendees at the consultation events spoke about disadvantaged students being overwhelmed by the amount of information on options. A couple of attendees also noted that application forms can be a barrier, due to young people's lack of willingness to complete them, or to write much for them.

5.2. Opportunity barriers

Within the COM-B model, opportunity refers to the physical and social environment that enables, or inhibits, the target behaviour.

5.2.1. Social networks

The literature indicates that disadvantaged students have a greater tendency to rely on informal (or "hot") career information from their social networks over formal (or "cold") information.²⁹ This preference for informal in-person support was also raised at one of the consultation events. However, this may be limiting as socioeconomically disadvantaged young people typically have lower social capital (discussed further in section 5.2.2.3.) Furthermore, informal supporters, including teachers, often lack up-to-date, comprehensive careers knowledge, particularly with regard to non-academic routes;³⁰ and their advice may be skewed by their own experiences or perceptions of the young person they are advising. For example, some school staff have too low expectations of

²³ Behavioural Insights Team (2016). Moments of Choice. [commissioned by the Careers & Enterprise Company]

²⁴ Rodeiro, C. V., & Vitello, S. (2020). Vocational Qualifications at Key Stage 4 and Key Stage 5: who takes them and how they fit into students' programmes of study.

²⁵ House of Lords Select Committee on Social Mobility. (2016). Overlooked and left behind: improving the transition from school to work for the majority of young people.

²⁶ Lupton, R., Thomson, S., Velthuis, S. & Unwin, L. (2021). Moving on from initial GCSE 'failure': Post-16 transitions for 'lower attainers' and why the English education system must do better.

²⁷ Mann, A., Denis, V., & Schleicher, A. (2020). Dream jobs?: teenagers' career aspirations and the future of work.

²⁸ *ibid.*

²⁹ Behavioural Insights Team (2016). Moments of Choice. [commissioned by the Careers & Enterprise Company]

Hughes, D. (2017). User insight research into post-16 choices: a report by CFE Research with Deirdre Hughes. December 2017.

³⁰ BIT (2018) Improving Teach Advice on Higher Education: A Solution Report for Advancing Access:

Teach First: Kashfipakdel, K., Rehill, J., & Hughes, D. (2019). Career-related learning in primary: The role of primary teachers and schools in preparing children for the future.;

some pupils,³¹ and can create a culture in which pupils only consider a narrow range of options.³²

5.2.2.1. Families, including parents

Every consultation event included a discussion of the influence of the young people's families, including their parents. Some attendees noted that the family's preconceptions often limit the options that the young person will consider. This is in line with research suggesting that disadvantaged youth will often choose to go into the same line of work as their family and peers.³³ There may be multiple factors contributing to that decision including geography and actual attainment or qualifications of the young person, but the desire to work in a field that was familiar to them and acceptable to the wider family was noted as a key driver of the decision.³⁴

Parental engagement is thought to help the development of information seeking and research skills, soft skills, such as self-efficacy, confidence, planning and goal setting behaviours, and employability skills, including teamwork and entrepreneurship.³⁵ However, various attendees at the consultation events also indicated that disadvantaged young people's families may not always be in the position to support career-related decisions. This could be for a

social capital.⁴¹ The strength of wider networks has also been found to be linked to wages later in life - with students who identified as having high social capital at 16, going on to earn on average 4.3% more than comparable participants without such social capital.⁴²

One benefit of having a wider network of high social value is the ability to secure career related experiences such as job shadowing, work experience or more informal recruitment practises.⁴³ Certain job roles require specific work experience when recruiting candidates - one example being evidence of lab time or industry experience for life science roles.⁴⁴ This is competitive experience to get and is often assisted by relevant networks such as family or school based networks. Students from disadvantaged backgrounds may lack these routes in and also have less awareness of the importance of securing such experiences prior to applying to jobs.

One consultation event attendee also noted that disadvantaged young people have less opportunity to develop soft skills like communication by speaking with adults outside of home and school, which creates issues when it comes to job interviews.

5.2.3. Limits of school-mediated career support

5.2.3.1. Timing and frequency

Representatives at the consultation events raised concerns that school-mediated career support often comes too late, and that disadvantaged young people have already ruled out many options as not suitable for them. Findings from the literature support this. Several students interviewed for the ASPIRES 2 project suggest that career education becomes a rushed focus in year 11 and recalled that they had already made their decisions around subject choice by this time.⁴⁵

Some attendees at the consultation events also noted that the kind of personalised guidance that is more important for disadvantaged groups is typically provided on a one-off basis, rather than in a sustained fashion. The ASPIRES 2 project found some students recalled having one short session with a teacher, whilst others could not recall any specialist time dedicated to careers.⁴⁶ Students from more advantaged backgrounds reported a higher frequency of career support and noted it being organised through their school.

5.2.3.2. Targeting support to those who need it

There is also evidence that access to career support relies on student self-referral in some schools.⁴⁷ As people have a tendency to go for the default option when presented with a choice,⁴⁸ requiring students to arrange a meeting with a career advisor will inevitably limit engagement. Furthermore, as disadvantaged students often have more competing pressures than their advantaged peers, putting the onus on students to seek out careers support may further disadvantage these students.

5.3. Motivation Barriers

Within the COM-B model, motivation refers to the reflective and automatic processes that drive the target behaviour, including both conscious and unconscious decision making.

5.3.1. Low career self-efficacy

The OECD conducted an international review of how young people's career aspirations are formed, which shows how socioeconomic status, gender and ethnicity shape the type of jobs that young people believe say they can

⁴¹ Moole, J., & Archer, L. (2018). Failing to deliver? Exploring the current status of career education provision in England. *Research Papers in Education*, 33(2), 187-215.

⁴² Mann, A., Kashefpakdel, E., & Percy, C. (2018). Socialised social capital?: The capacity of schools to use careers provision to compensate

and will achieve.⁴⁹ Class-based stereotypes can reduce career self-efficacy and restrict the education and career options that young people from low socioeconomic backgrounds perceive as available to them.⁵⁰ Such stereotypes may be held by the young person themselves and/or close personal influencers, such as their parents.

There is evidence to suggest that by the age of 15 high achieving students from lower socioeconomic backgrounds are four times less likely to hold higher occupational aspirations than similarly performing peers from higher SES backgrounds.⁵¹ This was reinforced at the consultation events, where a number of representatives stated that young people have already formed a perception of their own ability and what they are capable of by the time they leave primary school, and that this is reinforced at the secondary level. It was suggested that, due to a perception of limited options, many young people are drifting in Further Education college without having made a positive choice about what they want to do, making it less likely that they will stay and thrive.

Consultation event attendees highlighted the particular struggles experienced by those who are judged to have

Young people's needs at points of transition

Insights from the literature and consultation events suggest young people from more disadvantaged backgrounds require repeat career support, rather than one-off provision. Career support targeted at the needs of this cohort should aim to fulfil the following criteria:

- Focus on building aspirations at an earlier age (e.g. primary school or early secondary school). As discussed in section 6.1 below, early career support can help overcome stereotypes and expose young people to a wider set of options. It may also give disadvantaged students more time and opportunity to gain the experience they need for certain pathways.
- Help students reliably compare options and navigate complex issues at points of transition. In year 11, when students engage more proactively with career support, young people from more disadvantaged backgrounds may need greater support to reliably compare options, manage uncertainties associated with the transition, and troubleshoot issues (e.g. access funding, not achieving entry requirements).
- Career support available to all students should aim to support social mobility. For example, by seeking out more relatable role models (e.g. employers or alumni), encouraging students who would most benefit to attend employer events, and centrally coordinating work experience.
- Provision targeted at most disadvantaged should seek to avoid stigmatising this group. For example by reassuring students who are prioritised for interventions that post-16 choices are inherently complex and it is common to experience confusion or low self-belief whilst exploring education or career options.



6. Principles of effective career interventions

The aim of the following section is to explore the characteristics of career support interventions that enable successful transitions to education and employment among disadvantaged students. As discussed in the methodology section, this includes interventions that relate to career support with young people (aged 16-24), primarily those targeted at young people from disadvantaged or underrepresented groups, which have been evaluated. Where the evidence relates to international studies this is clearly stated. The quality of the evidence base and any gaps are also discussed.

6.1. Building aspirations and overcoming stereotypes

Overview

This section covers interventions designed to raise young people's career aspirations and counter stereotypical beliefs they may hold about their abilities.

6.1.1. Early interventions

There have been calls for career education to begin at an earlier age within schools, with some research highlighting the benefits of career-related learning beginning in primary school.⁶¹ Career support interventions in primary school are shown to help challenge the stereotypes children hold around job roles, broaden student aspirations⁶² and support a successful transition between primary and secondary school.⁶³ Early interventions can have a lasting impact on how young people perceive different occupations and the subjects that support them.⁶⁴

The Pathfinder programme is one example of a Key Stage 2 intervention, which aimed to boost education and career aspirations among disadvantaged pupils.⁶⁵ The programme focused on 5,000 year 6 pupils (aged 10 or 11 years old) and was piloted across 7 local authorities. The 38 schools who took part in the intervention worked individually with their local authority to develop a bespoke career programme for their students. Interventions across the schools can be categorised into four broad themes:

- Integrating career-related learning into the curriculum. Some used a role playing resource to help pupils build connections between education, work and lifestyle. Other schools encouraged students to write letters to local employers to set up visits and talks.
- School visitors. Visitors came into schools to help provide insight around certain career options. Participants were carefully picked to help minimise career-related stereotyping, examples included a female forensic scientist and a male nurse.
- External school visits. Trips to local sites, such as museums and universities, were used to broaden awareness of opportunities within the local areas.
- Transition. Students visited secondary school prior to transition, students took part in a mentoring scheme with year nine pupils.

The programme was evaluated using a mixed-method approach; primarily interviews and surveys comparing pupil data from the Pathfinder schools with 120 matched comparison control schools. Overall, self-reported data from students shows positive effects on awareness and confidence of career options and a decrease in stereotypical thinking around potential jobs. Future interventions with primary school pupils should seek to review which of the above intervention activities or combination of activities have the greatest impact.

Multiple attendees at the consultation events also noted that there is a gap in career provision in Key Stage 3 and that interventions during this time could be particularly impactful. It was stressed that this should not be left solely until decision points, when the young person is likely to experience information overload. This is endorsed by a qualitative study with 24 young people in different post-16 settings; including sixth forms, sixth form colleges, university technical colleges, further education colleges, apprenticeships and higher education.⁶⁶ This study indicates that providing career support at an earlier age gives disadvantaged students more time and opportunity to get the experience they may need for certain pathways.

6.1.2. Activities to boost self-efficacy

The best evidence of career support designed to actively counteract career-related stereotypes comes from research to encourage female students to pursue qualifications in science, technology, engineering, and maths (STEM). The following activities have been shown to be effective in encouraging students to consider education or

⁶¹ Kashefpakdel, K., Rehill, J., & Hughes, D. (2019). Career-related learning in primary: The role of primary teachers and schools in preparing children for the future.

⁶² Education and Employers (2018) Introducing Primary Children to the World of Work, Working Paper, London: Education and Employers

⁶³ Mann, A., Rehill, J. & Kashefpakdel, E. T., (2018) Employer Engagement in Education: Insights from international evidence for effective practice and future research.

⁶⁴ Howard, K. A., Kimberly, A. S., Flanagan, S., Castline, E., Walsh, M. E. (2015) "Perceived Influences on the Career Choices of Children and Youth: An exploratory study", International Journal for Educational and Vocational Guidance, Vol.15/2, pp.99-111.

⁶⁵ Wade, P., Bergeron, C., White, K., Teeman, D., Sims, D., & Mehta, P. (2011). Key Stage 2 career-related learning pathfinder evaluation (Research Report DFE-RR116).

⁶⁶ Hughes, D. (2017). User insight research into post-16 choices: a report by CFE Research with Deirdre Hughes. December 2017.

employment options they may otherwise discount due to low self-efficacy or internalised prejudice.

A career counselling group designed to increase STEM self-efficacy among female students (aged 14-16 years) was tested in the US.⁶⁷ The intervention included 9 weekly sessions focused on discussing the barriers and facilitators for taking a STEM subject, feedback and information about STEM careers. Students who received the intervention showed significant improvements in relation to their STEM self-efficacy (average increase of .99 on a Likert scale measure) and subsequent confidence when making career based decisions (average increase of 1.54 on a Likert scale measure). Although the sample size for this study was small (n=90), it is a useful starting point for understanding the format and focus of interventions that might help to boost career self-efficacy.

In another study, designed by BIT, three classroom based exercises were used to encourage female students in years 10 and 11, to select STEM A-levels.⁶⁸ These interventions were based upon the expectancy-value model, which suggests that educational decisions are based upon expectations of success and perceptions of value of a particular subject or career path.⁶⁹ Each activity involved students reviewing information, intended to promote self-belief and the perceived value of STEM subjects, and writing a message to future students to consolidate key information. The written elements of these activities draws on evidence of 'self-persuasion', which is the premise that people are more inclined to respond to their own argument in favour of carrying out a particular behaviour than to someone else's instruction, as this preserves their autonomy.⁷⁰ A pre-post study design was used to evaluate these interventions, comparing self-reported intentions to study STEM subjects before and after completing the interventions. Following the intervention high-achieving female students were more likely to say they intended to study two or more (er)21.tion high-achdesign wr(wo or mou)ore1.1 1.thovemet (igh44%stud46%)31.9.9 (4en elemengh-ate also (ah)10

6.2. Parental Engagement

Overview

This section covers interventions aimed at engaging parents and educating them on the different routes and opportunities available to their children.

Barriers targeted

- Social networks / Low career self-efficacy / Complexity of post-16 choices. Parents can have a big impact on their decision-making processes around post-16 options. Parents in lower SES groups may be inhibited from providing career support due to a lack of time and resources; their own negative experiences or inexperience in post-16 education and/or employment; or limited knowledge of the available options.

Key principles for interventions

- Timeliness. Provide practical tips and support on how parents can support their child with education and career options and transitions in advance of a decision point, i.e. allowing time to have those conversations.
- Create a non-threatening context. Parents may have negative associations with school, especially if they faced difficulties. Consider how to make career events more welcoming e.g. by hosting events off the school campus or creating anonymous ways for them to contribute.
- Consider the best mode of communication. As online access may not be possible for all, text messages, leaflets or outreach from relatable messengers may be more accessible.

Strength of evidence

There is a lack of specific parental engagement interventions in relation to career decisions within the UK. Several studies have been run in other countries but have small sample sizes and are not evidenced by RCTs.

Parental interactions help to form children's early understanding of what the shape of their career will be. Qualitative research with career practitioners indicates that parents provide career support in four key ways:⁷³

1. Practical support, e.g. by helping with CV writing, researching and analysing information to input to discussions, financial support;
2. Career-related modelling, by implicitly or explicitly sharing their own examples and experiences;
3. Verbal encouragement, by praising (or discouraging, either actively or inadvertently) educational and career choices;
4. Emotional support, by enabling a safe space to discuss these ideas and decisions.

Many of the attendees at the consultation events talked about the importance of engaging parents with school-mediated career support to open their minds to a broader range of education and career options. It was widely acknowledged that parents are powerful influencers of young people's educational and career destinations, however many do not know how best to engage them.

⁷³ Barnes, S. A., Bimrose, J. (2015) *Parental Involvement in Children's Education*. London: Routledge. They can be both a barrier and a facilitator of young people's educational and career choices.

Strength of evidence

- Although there has been a lot of research around the topic of peer mentoring, specific attention has not focused on its impact on careers decision making. The studies referenced here include smaller sample sizes so caution is advised in relation to the impact observed.

People tend to act in similar ways to others in their social group. For young people whose social references do not include people applying to university or moving away for a job, the likelihood of them pursuing it themselves is low, as they have adopted a 'not for them' attitude.⁷⁹ Exposure to role models via mentors and alumni programmes can be beneficial in breaking down these biases.

6.3.1. Mentoring

Traditionally mentoring involves an older, more experienced person being paired with a younger person to provide either a task-related or career-related function; or a more psychosocial support function.⁸⁰ Peer mentoring, which was proposed by a few attendees at the consultation events, differs as it involves matching mentees with a mentor who is closer in age (although often from a different year group), experience or background.⁸¹

A review of 73 youth mentoring programmes found mentoring interventions to have a moderate effect across a range of outcomes; including school attendance, attainment and drop-out.⁸² The meta-analysis concluded peer mentoring programmes to be as effective as the more traditional adult-young person mentoring set up. Mentoring programmes were most effective when:

- They are targeted at young people from backgrounds with greater levels of vulnerability, such as risk of academic failure.⁸³
- Mentor and mentee are matched on the basis of shared interest such as career aspirations. Perceptions of similarity can help to build stronger and higher quality relationships, creating a more beneficial and long lasting mentor-mentee bond. One example study involved a programme matching 156 young people at risk of violence with community business partners on the basis of shared career interests.⁸⁴ The students attended their business site for two hours four times a week and performed career related duties under the guidance of their mentor. The programme led to significant reductions in the number of days of suspensions for students who were mentored, in comparison to the control group.

One study paired disadvantaged students, defined here as eligible for FSM, looked after children or children with parents in the armed forces, with STEM undergraduate students in the lead up to their science GCSE exams.⁸⁵ Students (n= 86) were recruited from four schools and half were randomly assigned to receive a mentor. Mentoring sessions took place in school, for one hour a week during a 23 week period over the course of an academic year. Prior to the exams, each mentee also had a six hour mentor session at the university, which also included a tour of the university and a talk about higher education opportunities.

⁷⁹ Lavecchia, A. M., Liu, H., & Oreopoulos, P. (2014). Behavioral economics of education: Progress and possibilities (No. w20609). National Bureau of Economic Research

⁸⁰ Kram, K. & Isabella, L. (1985) Mentoring alternatives: the role of peer relationships in career development, *Academy of Management Journal*, 28, 110–132.

⁸¹ Angelique, H., Kyle, K. & Taylor, E. (2002) Mentors and muses: new strategies for academic success, *Innovative Higher Education*, 26, 195–209.

⁸² DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12(2), 57-91.

⁸³ Clarke, L. O. (2009). Effects of a school-based adult mentoring intervention on low income, urban high school freshmen judged to be at risk for dropout: A replication and extension (Unpublished doctoral dissertation). Rutgers, The State University of New Jersey, New Brunswick.

⁸⁴ Rollin, S. A., Kaiser Ulrey, C., Potts, I., & Creason, A. H. (2003). A school based violence prevention model for at risk eighth grade youth. *Psychology in the Schools*, 40(4), 403-416.

⁸⁵ Sharpe, R., Abrahams, I., & Fotou, N. (2017). Does paired mentoring work? A study of the effectiveness and affective value of academically asymmetrical peer mentoring in supporting disadvantaged students in school science. *Research in Science & Technological Education*, 36(2), 205–225.

Students who took part in the interventions achieved significantly better GCSE grades than their predicted grade. These students also showed greater positivity towards science subjects following the intervention. Unexpectedly, the programme also had an impact on the self-reported career interests of mentors. A post-intervention survey

- **School-mediated work experience.** Giving schools the responsibility to make appropriate matches for placements allows young people to experience a workplace they may otherwise not have been able to.

Strength of evidence

- The current body of research lacks causal evidence from experimental methodologies; with a focus on smaller pilot or case study based interventions, or on large dataset analysis and correlation findings.

earnings of the cohort at age 26. Overall, attending a career talk at age 14-15 years was associated with an increased wage premium of 0.8% at 26.

A follow up study aimed to compare the impact of 'proxy' capital (e.g. attending a careers talk within school) and 'real' capital (e.g. a family contact who could get them a job). Proxy social capital, in the form of employer access through careers talks, was found to be most beneficial to students from lower socioeconomic backgrounds. Participants who lacked real social capital (n=691) but attended school mediated career talks with external employers earned 8.5% more on average than peers who believed social networks alone would help them secure work. Attending career talks had no significant impact on the earning of participants with real social capital (n=481).

With both studies there are limitations around the design, most notably that wage outcomes are the result of multiple influences and there may be other variables not controlled for impacting the results. However, they point to the power that even a short duration intervention, attending even just one or two careers talks, can have on young people's career and economic outcomes.

6.4.3. Employer mentoring

Interventions with greater intensity may be required to support the most vulnerable or disengaged young people. The ThinkForward programme is a five year programme that provides targeted support to 14 year olds, deemed to be at risk of leaving education or employment.⁹³ It is currently being tested with three separate cohorts in London, Nottingham and Kent; in 2020 the London cohort saw the first group of graduates who experienced the full five year programme. Both Nottingham and Kent cohorts have been running for three years. Participating students are offered the following support throughout Key Stage 4:

- Dedicated support from a ThinkForward coach attached to their school, who helps them to create an initial action plan, which outlines expectations of both the coach and student. Coaches and students meet twice per half term for a planned session, which may also include other students.
- Access to a variety of skills and experience enhancing activities including workplace visits, work experience, and CV and interview workshops.
- A mentor, who is an employer from the local area, who they have 6-8 mentoring sessions with.

A pilot study of the programme with four schools was funded by the Education Endowment Fund (EEF) in 2016 to determine suitability for a larger scale RCT and see any impact on GCSE results, likelihood of continuation into post-16 education and pupil absences.⁹⁴ It was concluded that the programme was not ready for a larger scale evaluation due to issues of spillover effects around the coaches teaching other lessons. Although no impact was found on attainment and absences, the process evaluation highlighted how coaches and teachers found value in the programme. The programme is ongoing and the organisation recently published its own findings from its 2019 graduated cohorts in London and Nottingham (132 young people), showing that 86% of participants were in education, employment or training after six months. However, it is worth noting that at present, only overview findings have been published with little detail on the evaluation method, therefore it is hard to draw firm conclusions on the isolated impact of the intervention.

⁹³ ThinkForward (2020). *Annual Review 2018/19 Better and Brighter Futures*

⁹⁴ Education Endowment Foundation (2016). *ThinkForward Evaluation report and executive summary*

6.5. Personalised transition support

Overview

This section focuses on sustained, personalised support from a trusted adult offered at points of transition to help young people navigate choices and administrative processes, and troubleshoot any issues that arise.

Barriers targeted

- **Basic needs take precedence over career support /Complexity of post-16 choices.** Career decisions place a large cognitive burden on young people; for those from backgrounds with limited support, the pressure is even greater. The choices to be made are complex and standardised advice may not always meet the needs of a young person.
- **Limits of school-mediated career support.** The kind of personalised guidance that is more important for disadvantaged groups is typically provided on a one-off basis, rather than in a sustained fashion.

Key principles for interventions

- **Wrap around approach:** Programmes, which contain multiple interventions, which can be personalised to the needs of specific students are beneficial.
- **Using data to target students for preventative support.** Use real-time data to identify students in need of greater support and enrol them into programmes, which requires them to set goals. Ensuring regular feedback cycles can also help to keep young people on track.

Strength of evidence

- Several large scale trials have looked at the role of personalised transition support, although not focusing on the impact on career decisions. The evidence base discussed here is also heavily based within the US.

The process of making post-16 education and career decisions is often overwhelming for young people. Sustained, personalised transition support between a dedicated adult and a young person, was one of the interventions most commonly suggested by consultation event attendees. A more personalised approach allows flexibility to target support at the specific barriers an individual faces, this is particularly important for young people from a disadvantaged background, whose needs may fall outside more traditional career support. Attendees proposed some principles that should be central to this type of intervention:

- The formation of a positive, trusted relationship with the young person, and possibly their parents;
- The 'supporter' having good knowledge of a range of options and capacity to broker relationships with post-16 providers;
- Scope to offer practical support e.g. with completing applications, accessing finance, navigating physical journeys
- The involvement of the individual student in the design of the support offer.

The Learning and Work Institute reviewed 58 interventions - to improve academic attainment, engagement and later employment - among young people (aged 15-24 years) at risk of becoming NEET.⁹⁵ The review suggests that

⁹⁵ The Learning and Work Institute (2020). Evidence review: What works to support 15 to 24-year olds at risk of becoming NEET?

a 'wrap around' approach with multiple interventions, that can be flexed to individual needs, can benefit the most at-risk groups. Improving young people's confidence was a key driver in improving their engagement with career support; this came from interventions, which incorporated one-to-one meetings, a mentoring relationship and skill building activities.

One intervention, delivered in the US, provided personalised support to low income students, aged 17-18 years, in the transitional summer between graduating high school and starting college to help ensure the students enrolled.⁹⁶

6.6. Applying behavioural insights to career support interventions

Behavioural insights is an approach that brings together evidence from a range of academic disciplines - most notably psychology and economics - to understand how people make choices, respond to situations, interact with others, perceive the world and behave. Using this realistic understanding of human behaviour to make small changes to an intervention can make a marked difference to its efficacy. In the context of career support, interventions that apply behavioural insights have been used to increase attendance at career advice sessions¹⁰¹, encourage young people to consider and apply for post-16 options they may otherwise have ruled out,¹⁰²⁻¹⁰³ and persist in education or training.¹⁰⁴

The following approaches are well-evidenced in the behavioural science literature and could be embedded within the career support interventions discussed previously to facilitate greater engagement and improve impact.

- **Relatable messengers to increase uptake of career support.** Sharing the experiences of someone who has taken part in a programme can help promote uptake among similar groups. It is an approach that has been used in various contexts, for example increasing charitable giving¹⁰⁵ and applications among teachers for leadership roles.¹⁰⁶ The Australian study on page 27, suggests this approach could be promising for increasing the perceived acceptability of career support among more disengaged parents or young people.
- **Communications to normalise feelings of insecurity or low self-efficacy.** As discussed above, low self-belief can inhibit young people from disadvantaged backgrounds from engaging with career support. BIT previously demonstrated that using an appointment reminder text message to boost self-belief: "No one is born with a perfect career. Time & effort can boost your skills & CV..." reduced the number of missed National Careers Service appointments by 24%.¹⁰⁷ This approach could be applied to communications to promote uptake of career support among more disengaged young people or parents.
- **Short, low-cost activities to boost perceived similarity between young people and those offering support.** In a study in the US, teachers and students completed a short 'getting to know you' survey at the start of the school year and subsequently received feedback on the themes they had in common.¹⁰⁸ Those that took part in this exercise - particularly those from more troubled family backgrounds - reported higher perceptions of similarities with their teacher following the exercise. This short, low-cost activity could be used to increase trust and perceived reliability between young people and those offering career support; e.g. dedicated advisors, employers, or mentors.
- **Goal-setting activities to encourage repeat engagement and improve outcomes.** Goal-setting, in which learners set out what they hope to achieve on a course, is a commonly used practice in education and has been demonstrated to improve academic attainment and

¹⁰¹ The Behavioural Insights Team (2019). Annual Update Report 2017-2018. (Page 22.)

¹⁰² The Behavioural Insights Team (2020) Behavioural Insights and Engagement with Technical Education [unpublished]

¹⁰³ Great Britain. Department for Education Behavioural Insights Team (Organisation). (2017). Encouraging people into University.

¹⁰⁴ Great Britain. Department for Education Behavioural Insights Team (Organisation). (2018). Improving engagement and attainment in maths and English courses: insights from behavioural research

¹⁰⁵ The Cabinet Office Behavioural Insights team. (2013). Applying Behavioural Insights to Charitable Giving.

¹⁰⁶ The Behavioural Insight Team (2018). Can behaviourally informed communications increase applications, and appointments, to System Leadership roles?

¹⁰⁷ The Behavioural Insights Team (2019). Annual Update Report 2017-2018. (Page 22)

¹⁰⁸ Gehlbach, H., Brinkworth, M. E., King, A. M., Hsu, L. M., McIntyre, J., & Rogers, T. (2016). Creating birds of similar feathers: Leveraging similarity to improve teacher-student relationships and academic achievement. *Journal of Educational Psychology*, 108(3), 342.

retention.¹⁰⁹ The setting of goals and the formulation of 'if-then' plans, in which people preempt

7. Conclusion

Based on the insights and evidence that emerged from the consultation events and literature. We recommend that school-mediated career support reflects the following principles to support young people from disadvantaged backgrounds.

Principle 1: Target barriers that are exacerbated by economic disadvantage.

Those involved in designing career education strategies and programmes in schools and colleges should review how their offer targets the barriers set out in Figure 2 below. Wrap around approaches - which contain multiple interventions to tackle different barriers - and can be personalised to the needs of specific students are beneficial.



Figure 2. COM-B model of behaviour change.

As there will be individual differences in the extent to which these barriers affect the target audience, it could be beneficial to include young people and parents from low SES backgrounds in the development of school-mediated career support provision. Co-designing career support interventions with the target recipients could also help to increase engagement.

Principle 2: Occur on a repeat basis, rather than one-off provision.

Young people from more disadvantaged backgrounds require more personalised and sustained career support that comes on-stream before young people have ruled out options e.g. on the basis of class-based stereotypes. This should include:

- Early interventions (in primary or early secondary school) to build aspirations. Early career support can help overcome stereotypes and expose young people to a wider set of options. It may also give disadvantaged students more time and opportunity to gain the experience they need for certain pathways.
- Personalised transition support (in year 10-11) to help students reliably compare options and navigate complex issues. Young people from more disadvantaged backgrounds may need greater support to reliably

compare post-16 options, manage uncertainties associated with the transition, and troubleshoot issues (e.g. access funding, not achieving entry requirements).

Principle 3: Enable young people's influencers (e.g. parents or carers) to support them with careers-related activities.

Parental engagement interventions show good evidence-of-promise with disadvantaged groups and should be explored further. Parents and family networks heavily influence young people's education and career decisions but many parents do not know how best to support their child and those in lower SES groups may face additional barriers. Interventions typically involve sharing information about post-16 education or career options with parents at key decision points for their child, either via leaflets, websites, or facilitated workshops. Special efforts should be made to encourage more disengaged groups to take up support e.g. by hosting career events in non-threatening environments or using more relatable messengers as mediators.

Principle 4: Create social capital for young people with more limited networks e.g. through employer engagement and mentors.

There is strong evidence that interventions that help young people to build relationships with employers can provide a form of proxy social capital for disadvantaged young people who lack other networks, and lead to increased earnings in the longer term. Although the evidence in relation to peer role models (e.g. mentors and alumni programmes) is weaker, there is some indication that these activities can help to improve attainment. Schools and colleges can play an important role in establishing these relationships and should seek to facilitate work placements; use non-stereotypical role models for career talks; and match young people to mentors based on shared interest.

Principle 5: Use data to track engagement with career support and take additional measures to support at-risk students.

Collect individual-level attendance data at career events and provide preventative support to disengaged students from at-risk groups (e.g. low SES). Disengagement could be driven by a range of factors, for example low self-efficacy or overestimating the benefits of their own social capital. Students from at-risk groups, who do not participate in career support events or activities, should be prioritised for more intensive interventions e.g. wrap around support that can be personalised to the individual's needs.

Principle 6: Apply robust evaluation, ideally using experimental methods with behavioural outcomes.

The impact of career support with young people from disadvantaged backgrounds is an area that has not been widely empirically investigated in the UK. There is a need for further research to develop new career support interventions and further understand what works in relation to current approaches. Evaluations should explore the overarching impact of career support interventions in relation to real life outcomes (e.g. sustained engagement in post-16 pathways) and review how the components of interventions could be adapted to improve impact (for example, by applying behavioural insights to career support communications or activities).

