

RESEARCH AND ANALYSIS

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

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Executive Summary

Following a rise in unconditional university offers between 2013 and 2019 (University and College Admissions Service [UCAS], 2019), Ofqual conducted research to consider the potential impact of unconditional offers on students' A level attainment. Unconditional offers made prior to students sitting their A levels allow students access to a given degree course regardless of their A level results. Given that students receiving and accepting such offers might be less motivated to perform in their A level exams, we wanted to explore whether there were any implications for student's A level attainment.

The research draws on data from 2017 and 2018 when there were large increases in the number of unconditional offers, and was conducted prior to the coronavirus (COVID-19) pandemic. The research was also conducted prior to the Department for Education (DfE, 2021) consulting on possible changes to the admissions system to higher education in England; the Office for Students (OfS, 2020a) banning certain types of unconditional offers for a period during the pandemic; Universities UK publishing a code of practice for fair admissions that discourages institutions from making certain types of unconditional offers in particular circumstances (UUK, 2022); and the number of unconditional offers declining since 2020 (UCAS, 2023). While the context has therefore changed considerably, our findings provide evidence relating to the potential impact of unconditional offers on students' A level attainment, that can contribute to any future debate about the system of university admissions in England.

The research considers the potential impact of unconditional offers on students' A level attainment – focusing on overall attainment (across 3 subjects), as well as attainment in a selection of A level subjects (art and design, biology, business, mathematics and psychology). To provide further context to our findings, we also consider the factors influencing unconditional offer making. We consider this from two different perspectives: the perspective of students and the perspective of individual offers. The former considers the factors that influence whether an individual student receives an unconditional offer, and the latter considers the factors that may influence whether an individual offer is unconditional. The research focuses on 'typical' A level students – students who sat 3 A levels at the end of Year 13 – applying to university through the main UCAS scheme. We use data from both 2017 and 2018 to consider possible changes over time as the proportion of students receiving unconditional offers increased.

We found that, when controlling for student background characteristics that are linked to A level performance, there is a relationship between accepting an unconditional offer as a firm choice and overall A level attainment. A student holding an unconditional offer as a firm choice achieves, on average, between half and three

quarters of a grade lower across their 3 A levels than a student not holding an unconditional offer as a firm choice (i.e., up to around a quarter of a grade per subject). Furthermore, while the findings were mixed at the individual subject level, in general, a student holding an unconditional offer as a firm choice tended to perform worse than a student not holding an unconditional offer as a firm choice.

Our analyses also show that, when controlling for student background characteristics, the likelihood of a student receiving an unconditional offer was higher in 2018 than 2017. Students studying expressive subjects at A level (e.g., art and design) were more likely to receive an unconditional offer, and students studying STEM subjects were less likely to receive an unconditional offer, when compared to those studying applied subjects (e.g., business). We also found that an offer was more likely to be unconditional when the application was to a lower tariff university, and the likelihood of an offer being unconditional varied across degree subject areas. For example, applications to maths, medical and veterinary science related subjects were less likely to receive an unconditional offer than applications to engineering subjects.

Introduction

Following a rise in unconditional university offers between 2013 and 2019 (UCAS, 2019), Ofqual conducted research to consider the potential impact of unconditional offers on students' A level attainment. Given that students receiving and accepting such offers might be less motivated to perform in their A level exams, we wanted to explore whether there were any implications for student's A level attainment.

The research focuses on the impact of unconditional offers on A level attainment, but to provide further context to our findings, we also considered the prevalence of unconditional offers and the factors influencing whether students received an unconditional offer. The analyses focused on A level qualifications.

The research draws on data from 2017 and 2018 when there were large increases in the number of unconditional offers, and was conducted prior to the coronavirus (COVID-19) pandemic. The research was also conducted prior to the Department for Education (DfE, 2021) consulting on possible changes to the admissions system to higher education in England; the Office for Students (OfS, 2020a) banning certain types of unconditional offers for a period during the pandemic; Universities UK publishing a code of practice for fair admissions that discourages institutions from making certain types of unconditional offers in particular circumstances (UUK, 2022); and the number of unconditional offers declining since 2020 (UCAS, 2023). While the context has therefore changed considerably, our findings provide evidence relating to the potential impact of unconditional offers on students' A level attainment, that can contribute to any future debate about the system of university admissions in England.

The following section provides the backdrop to the research and includes a brief overview of the university admissions system in England (including how university offers are defined) and a summary of existing evidence relating to the potential implications of unconditional offers. It is worth noting that the following discussion focuses on the approach to university admissions and evidence relating to unconditional offers that was relevant at the time that this analysis was conducted. We therefore do not report on the use of unconditional offers during the pandemic or since, other than to note here that the prevalence of unconditional offers has decreased significantly since 2020 (UCAS, 2023).

Background

University admissions in England

Students in England applying to university aged 18 currently do so ahead of sitting their final exams at the end of Year 13. Applications are made via UCAS ahead of a deadline in the January¹ of the year that students intend to start university.²

Individuals can apply to up to 5 courses (that can be at the same or different institutions), and applications are made on the basis of grades predicted by teachers for the qualifications that students are taking. In the context of A levels, for example, a student's predicted grades might be BBB. Universities decide whether to accept or reject an application based on the application and additional selection measures such as interviews and admissions tests (where appropriate), and where a student is accepted, an offer is made by the university. For students applying by the deadline in January institutions make offers by early May (otherwise choices are automatically unsuccessful), and in 2019, most applicants (92.5%) received at least one university offer (UCAS, 2019).

There are different types of offer that universities can make, but in the broadest sense, offers can be conditional or unconditional (but see below for a more detailed consideration of the definition of unconditional offers).

As the name suggests, conditional offers are contingent on a student meeting certain conditions specified by the university. Generally, this means that if a student accepts the offer, they are required to achieve certain grades in the qualifications that they are studying to guarantee access to that course and institution: for example, students may need to achieve grades ABB at A level, achieve a particular grade in a certain subject, or achieve a certain number of UCAS tariff points³ (regardless of the subjects that they are taking).

Unconditional offers, on the other hand, do not have conditions attached to them relating to the grades that students must achieve (but note that there may be other conditions associated with the offer, as discussed below). As such, a student accepting an unconditional offer is guaranteed a place on a particular course, regardless of their qualification results.

¹ At the time the research was conducted the deadline for applications was mid-January. The deadline is now towards the end of January (typically the last Wednesday of the month). Note that for some courses such as medicine, applications are made earlier (i.e., by mid-October).

² Note that students can also apply but defer their entry to the following year.

³ UCAS tariff points are allocated to qualifications usually studied by students aged 16 - 18, e.g., a grade A at A level is worth 48 points, a grade B is worth 40 points, etc.

Once students have received offers from universities, they generally choose one offer as their firm (or first) choice and one offer as their insurance (or back-up) choice, and there are deadlines for making these choices. Around the time that this research was conducted, students receiving all their offers by the end of March were required to make any decisions by the beginning of May, and students receiving all their offers by early May were required to make any decisions by early June. Notably, these deadlines are either prior to A levels exams typically starting (in early May), or when A level exams are on-going. This means that some students will have known the offers that they hold and have made their choices ahead of sitting their A level exams, while others will have made their choices when A level exams were on-going. Further, even those that had not made their choices before sitting their exams would likely have known at least some of their offers. This is a key point to bear in mind since the timing of these decisions means that the knowledge of holding certain offers could, potentially, have impacted upon student's motivation for their exams.

When A level results are issued, students are placed at either their firm or insurance choice (in that order), depending on the offers that they hold and their A level results. If students' actual grades do not meet the conditions for either of their offers (assuming that the offers are conditional), and their choices do not have the capacity or wish to accept them with lower grades, they may enter 'clearing', a process where students can apply to universities that have places remaining on their courses. Because we are concerned here about the potential impact of unconditional offers on A level attainment, we are focusing on students holding unconditional offers ahead of sitting their exams (i.e., students who will take up a place regardless of their A level results). The current analyses therefore do not focus on those being placed through clearing.⁴

Defining unconditional offers

As outlined above, University offers can be defined as conditional or unconditional in the broadest sense. However, there are different definitions of unconditional offers. These definitions are used by UCAS when reporting on offer-making in their end of cycle reports, but are not definitions that are explicitly used by universities (though offers do fall into one of the categories outlined by UCAS).

Following the 2019 application cycle, UCAS (2019) updated their definitions of unconditional offers and defined 3 types of unconditional offers that are collectively known as offers with an unconditional component or element. The 3 types are

⁴ Note that a small number of students may have held an unconditional offer when sitting their A levels but later declined this and entered clearing. However, the numbers are likely to be very small since accepting an unconditional offer essentially means that a student is contracted to take up a place at that institution.

conditional unconditional offers, **direct unconditional** offers and **other unconditional** offers.

A **conditional unconditional** offer is perhaps the most complex, as the status of the offer changes depending on whether the student accepts the offer as their firm choice or not. As such, the offer is conditional when the offer is made, but is adjusted to be unconditional if it is selected as the student's firm choice. If a student accepts the offer as their insurance choice, it remains conditional. Conditional unconditional offers are identified in the admissions system through free text fields that providers can use to communicate any additional information to applicants. The offer conditions are analysed at the point the applicant replies to the offer, or if this is not available, 30 June.

The second type of unconditional offer – a **direct unconditional** offer – is an offer that is always unconditional and is therefore unconditional at the point of offer. This means that the offer is unconditional regardless of whether a student accepts the offer as their firm or insurance choice.

The third type – **other unconditional** offers – are offers that are conditional at the point of offer but then become unconditional before 30 June – the final date on which main scheme applications can be submitted. These offers are not identified as conditional unconditional offers from the offer conditions, so are defined separately to those described as conditional unconditional offers above.

While these are the key definitions that form the basis of UCAS's reporting on offer making, there are some points to bear in mind. First, identifying the type of offer is not always straightforward and some offers might have other incentives associated with them that are not related to a student's grades. For example, an offer might be unconditional (in terms of qualification results), but students might be promised a monetary bursary if they achieve their predicted grades. Thus, while a student's university place does not depend on their grades and the offer is defined by UCAS as unconditional, a student might be more motivated to achieve certain grades because of other incentives.

Second, there are likely to be some conditional offers that are more akin to unconditional offers than conditional offers. For example, a high performing student (e.g., predicted to achieve 3 grade As) might receive a conditional offer that only requires them to achieve 3 grade Es. While this would be defined by UCAS as a conditional offer, it is possible that the student might be less motivated than if they were required to achieve higher grades. Identifying such offers is not straightforward, but the extent of such offers is unlikely to have a material impact for the purposes of this analysis, so we do not consider this issue further.

The following section provides an overview of existing evidence relating to unconditional offers, focusing on the period that this research was conducted. Here, we refer to the three types of unconditional offers collectively as 'unconditional

offers', unless otherwise noted. Where possible, we report on data from the most recent application cycle (2019) at the time this research was conducted and focus on 18-year-old students.⁵

The rise in unconditional offers - existing evidence

Historically, the majority of university offers made to 18-year-old students in England, Wales and Northern Ireland were conditional and only a small number of offers were unconditional. Those offers that were unconditional tended to be in arts related subjects, where offers were made on the basis of work already completed by the student. Figure 1 (reproduced from a report by UCAS, 2019) shows how this changed over time. In the 2019 application cycle, over a third of applicants (37.7%) received at least 1 offer with an unconditional component, compared to just over 1% in 2013 (UCAS, 2019). Furthermore, around 14% of all offers made in 2019 were offers with an unconditional component. Thus, while unconditional offers were still in the minority for 18-year-old applicants in 2019, there was a substantial rise in a relatively short period of time.

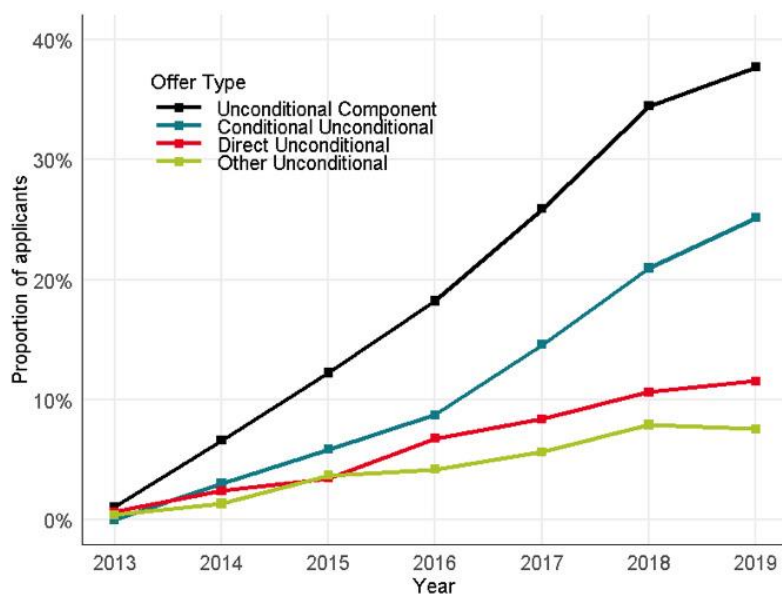


Figure 1. Proportion of applications receiving an unconditional offer (overall for offers with an unconditional component and by type of unconditional offer)

The rise in unconditional offers during this period was largely driven by a rise in conditional unconditional offers (see Figure 1). UCAS (2018) note in their end of

⁵ Note that the data reported by UCAS tends to include students from England, Wales and Northern Ireland, although our research focuses on students in England. We refer to 18-year-olds as those turning 18 by the end of the academic year.

cycle report that no offers were identified as conditional unconditional offers in 2013, but this changed significantly in subsequent years.

The rise in unconditional offers prompted concerns that such offers might not be in the best interests of students. For example, it was argued that unconditional offers were intended to attract students and fill available places at that institution (the rise in unconditional offers coincided with a decline in the 18-year-old population, which may offer some support for this argument). Such concerns were particularly associated with conditional unconditional offers, that were likened to a form of 'pressure selling' by OfS (2019), since the offer only becomes unconditional if it is accepted as a student's firm choice.

There were also concerns that unconditional offers might influence a student's decision-making, leading them to choose what they perceive to be a 'safer' option, rather than what might be a more appropriate course that has more challenging entry requirements. Indeed, there is some evidence that holding a conditional unconditional offer impacted on students' decision-making (as reported by students; UCAS, 2018), which could ultimately cap students' aspirations. Further, the likelihood of accepting a conditional unconditional offer varied by a student's predicted grades, such that those with higher grades were less likely to accept a conditional unconditional offer (UCAS, 2019).

Concerns relating to unconditional offers featured heavily in the media during this period as the number of unconditional offers rose (e.g., see Allison, 2018). They were also raised in government, prompting the then Education Secretary to write to 23 universities ahead of the 2019 admissions cycle encouraging them to end what was perceived as an 'unethical practice' (DfE, 2019). While some universities responded by changing their approach the subsequent year, e.g., the University of Nottingham (2019) decided to stop making any unconditional offers in 2019, others rebuffed the concerns, arguing that unconditional offers were only made to certain students based on merit. Further, some providers, such as Nottingham Trent University, reportedly published their own data to defend the use of unconditional offers (Bennett, 2020), arguing that there was no evidence that unconditional offers impacted on student's university performance (but see below regarding the potential impact on students' A level attainment and University drop-out rates).

There are a number of reasons that providers cited for making unconditional offers, one of which was to support students with mental health difficulties. There is some evidence to support this – for example, UCAS (2019) reported the positive effects on mental health as one of the reasons that students viewed unconditional offers favourably. Further, in their end of cycle report in 2018, UCAS reported on a number of case studies offering further support for this. And, in a survey of 30,000 18-year-old applicants in England, Wales and Northern Ireland, UCAS (2019) found that students holding an unconditional offer were less likely to report feeling stressed,

worried or uncertain when waiting for their exam results, compared to those holding a conditional offer (note that these figures do not account for any other student characteristics though and are only based on a sample of students).

Who was making unconditional offers?

While there were likely to be different factors influencing unconditional offer making, it is noteworthy that unconditional offers were not typically made by all providers (UCAS, 2019). In 2019, around two thirds of large providers⁶ (88 out of 141 institutions) made some unconditional offers, a figure that had remained stable since 2018 (but had previously increased each year since 2013). This means that around a third of providers did not make any unconditional offers in 2019. Further, the proportion of offers that were unconditional varied across institutions. For two thirds of institutions, around 10% of offers were unconditional, while for a small number of institutions over 50% of offers were unconditional.

There is some evidence that these differences in offer-making are related to the tariff of the university and degree subject area (UCAS, 2019). Universities can be grouped into high, medium and lower tariff providers according to the average attainment of the UK 18-year-old students that are accepted onto their courses (as defined by UCAS tariff points). As such, a higher tariff university generally accepts students with higher average attainment, while a lower tariff university generally accepts students with lower average attainment.

Figures published by UCAS (2019) show that lower tariff providers were the most likely to make unconditional offers. In 2019, 22.3% of offers made by lower tariff universities were unconditional (an increase of 4.9% compared to 2018), compared to 18.6% for medium tariff and 3.6% for higher tariff providers. When considering just conditional unconditional offers, the trend is slightly different, with medium tariff providers the most likely to make conditional unconditional offers (13.7% of all offers), followed by lower tariff, then higher tariff providers (9.4% and 3.3% of all offers, respectively).

The trends at provider level are likely to be linked (in some instances) to differences by subject, since unconditional offers are typically more prevalent in some subject areas than others (UCAS, 2019). In 2019, the subject area with the highest proportion of direct unconditional offers was creative arts and design (13% of all offers were unconditional). This is perhaps not surprising given that such offers are often made on the basis of portfolio evidence that students have already generated or an audition process (and it is arts related subjects where unconditional offers have been made historically). As such, if a provider is mostly focused on arts subjects,

⁶ Those with an average of at least 500 acceptances each year since 2013.

then it might be unsurprising that more unconditional offers were made by that institution (but note that most providers are not specialised to this extent).

Other subjects with a high proportion of direct unconditional offers in 2019 included communications and media (6.7% of all offers made), architecture (5.7%) and computing (4.3%). Again, it is possible that for at least some of these subjects the offers were based on an audition or interview process and portfolios of work.

For conditional unconditional offers, the trends by subject are slightly different, though there are some similarities. Communication and media subjects had the highest proportion of conditional unconditional offers in 2019 (15.5%), followed by humanities and liberal arts (13.6%), architecture, building and planning (12.8), and creative arts and design (12.2%). Again, there are likely to be some instances of students being given offers based on an interview process and a review of their work, but this seems less likely where it is a conditional unconditional offer – if a provider is willing to accept an applicant based on what they have seen, it is less clear why that should only be the case where the applicant accepts the offer as their firm choice.

Who receives unconditional offers?

UCAS (2018) have also published information suggesting that unconditional offer making differs according to various student characteristics. Historically, unconditional offers tended to be more common for students with relatively high predicted grades, but over time there has been a shift towards unconditional offers being more common for students with lower predicted grades (though to some extent this is likely to be a reflection of the providers that were making such offers). As such, in 2018, students most likely to receive an unconditional offer were those predicted to achieve 11 points⁷ (equivalent to grades BBC), while in 2014 and 2015, students most likely to receive an unconditional offer were those predicted to achieve 15 points (equivalent to AAA). UCAS also reported that students from areas with lower higher education participation rates (as measured by POLAR4 quintiles)⁸ were more likely to receive an unconditional offer than students from areas with higher participation.

⁷ Note that grades are converted to points such that A* = 6, A = 5, B = 4 and so on. This is different to UCAS tariff points.

⁸ POLAR4 quintiles classify areas across the UK into groups, based on the level of participation in higher education (for students entering at age 18 or 19).

Implications and impact of unconditional offers

Alongside the figures showing the increases in unconditional offers, there is some evidence relating to the potential implications of unconditional offers for students. UCAS (2019) reported that, in 2019, students holding a firm unconditional offer were more likely to miss their predicted grades by three or more grades than those holding a firm conditional offer (56.7% compared to 42.8%, respectively).⁹ This difference was statistically significant when controlling for prior attainment, predicted A level grades and student background characteristics, such that students holding a firm unconditional offer were, on average, 11.5 percentage points more likely to miss their predicted grades than those holding a firm conditional offer. There were also some differences by gender, with males holding an unconditional offer more likely to miss their predicted grades than females. However, males with conditional offers were also more likely to miss their predicted grades than females, meaning that males and females with unconditional offers have similar levels of attainment relative to predicted grades. The analysis also suggested that there is little difference between advantaged and disadvantaged students in terms of attainment relative to predicted grades.

While these findings suggest a possible impact of accepting an unconditional offer on A level attainment, there are some limitations to bear in mind. First, the analyses focused on predicted grades, and there is considerable evidence suggesting that predicted grades are likely to over-predict student attainment rather than under-predict it (e.g., see Department for Business, Innovation and Skills, 2013; Gill & Benton, 2015; Wyness, 2016; Gill, 2019; Murphy & Wyness, 2020; UCAS, 2021; Leckie & Maragkou, 2023). Further, it is possible that some students' grades are over-predicted to a greater extent than others, or that students choosing an unconditional offer as their firm choice were those that were more likely to under-perform anyway. As such, it might not necessarily be the act of accepting an unconditional offer that has resulted in under-performance relative to a student's predicted grades.

Other evidence considering the potential impact of unconditional offers on students was published by the OfS (2020b; 2022). This work suggested that students who accessed their university course via an unconditional offer were less likely to continue at university beyond their first year of study. Further, when controlling for other factors that might impact on progression (including predicted entry grades, level of study, higher education provider, subject, and student characteristics), this difference was statistically significant. OfS (2020b) estimate that accessing university via an unconditional offer reduced the continuation rate by 0.65 percentage points,

⁹ Note that this analysis only included students with 3 predicted A level grades.

which equates to approximately a 10% rise in the drop-out rate after the first year of study (based on data from the 2016 and 2017 application cycles). Note though that the number of students not completing their first year of university is relatively small regardless of the offer type held. Further, as previously discussed, some universities are more likely to make unconditional offers than others, and this might impact on the findings.

To summarise, the existing evidence suggests that there are trends relating to unconditional offer-making by provider and student characteristics. Most significantly in the context of this research, there is some indication that students holding an unconditional offer might be more likely to under-perform at A level. As outlined above, however, there are limitations to these findings given the focus on comparisons with predicted grades, and our research therefore aims to add to this evidence.

Research overview and aims

This research explores the potential impact of unconditional offers on A level attainment, while controlling for student background characteristics. Our key research question is therefore as follows:

How do students perform in their A levels – overall across 3 A levels and at individual subject level – if they:

- received an unconditional offer
- accepted an unconditional offer (as either a firm or insurance choice)
- accepted an unconditional offer as a firm choice

We also consider the factors influencing whether students received an unconditional offer or whether an offer was unconditional (i.e., we conducted analyses at both the student level and the application or offer level). We took this approach because there are some factors that we are interested in that are associated with an individual offer, rather than the student. For example, we wanted to consider factors such as university tariff and degree subject area, but these are associated with each application that a student makes, rather than the student themselves (since students can apply to up to 5 different courses that can also be at different institutions).

The research focuses on data from 2017 and 2018 since, at the time of conducting the analyses, data from the most recent application cycle (2019) was not available. Given that the rise in unconditional offers was already fairly significant prior to 2019, this was deemed sufficient to explore the role of unconditional offers on students' attainment at A level.

Before considering our methodology, it is worth clarifying our approach to defining unconditional offers. The data that we used in this research does not categorise offers according to the 3 definitions outlined by UCAS (see discussion above) and we only have data relating to whether an offer was conditional or unconditional on 30 June each year,¹⁰ and whether an offer was a conditional unconditional offer or not. These variables, however, have enabled us to use 2 approaches to defining unconditional offers.

First, we identified what UCAS term 'direct' unconditional offers (i.e., offers that were unconditional at the point of offer). These are offers that resolved to be unconditional by the 30 June deadline but are not flagged as being a conditional unconditional offer.

¹⁰ The 30 June is a deadline after which applications are entered into clearing. However, as outlined earlier, applicants generally make their university choices well ahead of this date, by early May – ie ahead of sitting their A level exams.

Second, we identified offers with an unconditional component (i.e., all types of unconditional offers). We will refer to these as ‘any unconditional offers’, as they include any offers that were flagged as being a conditional unconditional offer, regardless of whether they resolved to be conditional or unconditional (once students had made their university choices), as well as those offers that were direct unconditional offers. Throughout this report we refer to findings using these alternative approaches to defining unconditional offers, identifying any differences in the findings as appropriate.

It is also worth clarifying how we have identified students with unconditional offers, given that students can apply to up to 5 institutions and may receive up to 5 offers. For the purpose of our analyses, we consider a student to have received an unconditional offer if they have received *at least one* such offer (regardless of the other offers that they received). Breaking this down further, we have identified students that received a direct unconditional offer, and students that received a conditional unconditional offer. We have classed those receiving both types of offers as having received a direct unconditional offer (i.e., the direct unconditional offer supersedes the conditional unconditional offer).

Methodology

Research design

The issue

Our key research question focuses on whether receiving an unconditional offer, and accepting it, impacts on students’ A level attainment. Ultimately, we are interested in the causal effect of receiving, accepting, and accepting an unconditional offer as a firm choice on A level results. This causal effect is not straightforward to identify though, because students who expect to perform less well at A level may be more inclined to receive and accept an unconditional offer, hence the direction of the causal relationship is not clear-cut. If performance on A level exams comes after receiving an unconditional offer and after the decision to accept it, expectations in relation to how a student will perform in their A levels (that are known well before exams are taken) can play a major role on both the decision of making an unconditional offer and accepting it.

First, in deciding whether to make an unconditional offer, admissions tutors use available information at the point of application, mainly related to a student’s prior schooling and socio-demographic characteristics. It is possible that there are specific student characteristics that can make an application more likely to receive an

unconditional offer. These student characteristics (e.g., prior attainment at GCSE) may also affect performance in A level assessments.

Second, it is possible that students with lower motivation and aspirations are more likely to accept, and perhaps to accept as a firm choice, an unconditional offer, if they receive one. All things being equal, these students with lower motivation and aspirations are also more likely to perform less well in their A levels, regardless of whether they received and/or accepted an unconditional offer.

In other words, there are factors that may simultaneously affect both student performance on A level exams and the probability of receiving and/or accepting an unconditional offer. Unless these factors are observed and controlled for, any attempt to retrieve a causal effect of receiving, accepting, and accepting an unconditional offer as a firm choice will be unsuccessful. Therefore, in order to identify the causal effect we are after, it would be necessary to study the relationship between receiving/accepting an unconditional offer and A level performance, once all the factors potentially affecting admissions tutors' decisions to make an offer and students' decisions to accept it are allowed for.

Empirical strategy

In order to deal with the issue described above, we have used a regression analysis. This entailed specifying a model to explain A level results as a function of whether an unconditional offer was received/accepted and other potential factors affecting A level performance.

The advantage provided by the use of a regression approach is that, in principle, it allows us to estimate the marginal effect of receiving an unconditional offer on A level attainment, once the other factors potentially affecting A level performance are controlled for. In practice, however, in order to claim the causality of such an effect, all the variables potentially affecting A level performance should be included in the regression specification. Controlling for all these factors is virtually impossible because some of them may be unknown and, even if they are known, they may be difficult to observe and/or measure (as in the case of motivation and aspiration). Hence, although we will not be able to make causal claims, by controlling for as many factors as possible we aim to estimate a measure of association between receiving/accepting an unconditional offer and A level attainment, net of factors known to affect performance on exams. This is also known in empirical research as selection on observable approach.

The factors potentially affecting A level performance that we controlled for comprise prior attainment, socio-economic background, and some motivational aspects. In addition to data on university applications and offers, this required a detailed account of students' characteristics, their prior schooling and their choices. To retrieve as

much information as possible on students, we exploited administrative data from a number of different sources.

Details of the regression approach and the data used in the analysis are described in the next two sections.

Regression analysis

The main regression model of interest for the analyses of the effect of receiving/accepting an unconditional offer on A level performance takes the form:

$$y_{ij} = F(\alpha + \beta x_{ij} + \gamma z_{ij} + u_j) + e_{ij} \quad (1)$$

where: y_{ij} is the dependent variable, a measure of A level achievement of student i in centre j ; x_{ij} represents the main independent variables related to whether an unconditional offer was received or accepted by student i in centre j ; z_{ij} are a set of covariates potentially affecting A level achievement; u_j and e_{ij} are random variables at centre and individual level, respectively, which follow a normal distribution with mean zero; α, β, γ are the regression coefficients that will be estimated, and among which β yields the effect of unconditional offers on A level performance. As discussed above, β cannot be interpreted as the causal effect of unconditional offers, but as a measure of association, once all the factors included in z_{ij} are controlled for.

In equation (1) F indicates that a transformation may be needed to account for the distribution of the dependent variable. If A level performance has a (quasi) normal distribution, a transformation is not needed, and a linear regression model is used. However, if A level performance is measured as whether a grade has been achieved or not, y can only take the value 1 (achieved) or 0 (not achieved). In this case F will be the logistic function and a logistic regression model will be estimated, instead of a linear regression.

It should be noted that when a linear model is used, the estimate of β is measured on the same scale used for y and its interpretation is straightforward. When a logistic regression is used, then a transformation will be needed to interpret the size of the effect. In these cases, we use odds ratios. An odds ratio equal to 1 means that there is no effect on the dependent variable; odds ratios greater than 1 represent a positive effect; odds ratios less than 1 represent a negative effect.

Our data is hierarchically structured, with students clustered within schools and colleges. Failing to allow for the fact that students from the same centre are more likely to be similar to each other than students from different centres could potentially lead to wrong conclusions. We used multilevel and mixed effects regression models to account for the hierarchical structure of the data.

Data

Sources of data

To retrieve as much information as possible about university offers and factors potentially affecting students' A level attainment, data was collected from three sources.

- UCAS data on students' university applications
- results data submitted to Ofqual by exam boards
- the National Pupil Database (NPD) held and maintained by DfE

Information relating to university applications and offers was obtained from UCAS. The UCAS data comprised three linked datasets:

- 'Application' dataset – detailing applications to the UCAS undergraduate scheme from all students with at least one application. This dataset also contains information on each offer received by students
- 'Applicant' dataset – containing some basic demographic information on students and details of the schools or centres through which their applications were submitted
- 'Qualifications' dataset – listing A level subjects studied by students and their predicted grades

Information on students' attainment (i.e., students' results) was retrieved from data already held by Ofqual. All exam boards that provide GCSEs and A levels in England submit data annually to Ofqual around a week before results are issued. This dataset contains a number of student identifiers, alongside students' marks and grades (for example, the A level dataset contains the grades issued that summer to each student who sat an A level). A level data for 2017 and 2018 and AS data for 2016, 2017 and 2018 were used in these analyses.

Information on student and school characteristics was retrieved from the NPD.¹¹ The NPD contains data from numerous datasets including school census data and Key Stage attainment data, and is maintained and made available by the Department for Education. This report is mainly based on the Key Stage 5 extracts of the NPD for 2017 and 2018, which also includes school census data for Key Stage 4 and Key Stage 2.

¹¹ Note that although the NPD also contains student grades, we used the 'amended version' of NPD, which contains results following a number of data checks and corrections (including any post-results changes). For this reason, we used students' grade from the data submitted by exam boards ahead of results, as these represent the actual results issued to students in August and used by UCAS for admissions purposes.

The availability of these three data sources gave us the opportunity to analyse the impact of receiving unconditional offers on A level attainment, while controlling for other factors potentially affecting performance. To conduct the analysis, however, it was necessary to pre-process the data to collate all the relevant information from the different sources and create a dataset on which to fit the regression models described above.

Data linking

As the data collected from different sources did not share a unique identifier for individual students, records were merged using a set of linking keys constructed from unique combinations of fields that were common across the datasets.

The first step was to merge the NPD data to the exam board data. Given the lack of a unique common identifier to be used across data sets, we used linking keys constructed from a combination of the following variables: student number, centre number, forename, surname, date of birth. This linking strategy yielded unique matches in the NPD data for 79% of the 245,978 18-year-old students taking exams in England in the 2018 exam board data, and 63% of the 248,282 students in the 2017 exam board dataset. Further checks on the linking procedure did not reveal that any bias was introduced in the data due to the lower match rate in 2017.

In the second step, the individual UCAS files were merged with the combined NPD/results data, using linking keys as previously described. This yielded unique matches in the UCAS data for 78% of the 193,699 records in the combined NPD/exam board dataset for 2018, and 77% of the 157,217 records in the combined NPD/exam board dataset for 2017.

It should be noted that, with the aim of ensuring the quality of the data analysed, the linking procedure we used was rather conservative. It is quite possible, for example, that linking keys for the same students are recorded slightly differently across data systems. For example, a student named Kathryn could appear in the NPD as 'Kathryn' and in UCAS data as 'Kate'. Although we corrected names and surnames for obvious typographical errors and different use of punctuation (e.g., double barrelled names), we did not make any assumption and we only considered exact matches, i.e., where the linking keys across data sets were exactly the same. Using fuzzy matching and allowing the identifying keys not to be exactly the same across data systems would have allowed us to match more students. Although this would have increased the match rate, it would also have inevitably led to some potential false positives, i.e., matching records that belongs to different students.

The final dataset

The dataset resulting from the linking procedure described above was then filtered to include only records for what we consider to be ‘typical’ A level students applying to university, and offers they received. We defined students as being ‘typical’ if they fulfilled all the following criteria:

- sat three A levels
- sat A levels in England
- sat A levels in Year 13
- applied to start a UK university course in the autumn following their A levels
- applied to University through the UCAS ‘main scheme’ (i.e., not through clearing)
- received at least one conditional or unconditional offer (i.e., not including declined candidates, course changes, or invitations for interview).

Only records concerning students meeting the above criteria who could be linked between all three original datasets were included in the final dataset, and therefore in the main analyses presented in the results sections of this report.

We checked whether this could have distorted the results, but the additional analysis presented in Appendix A shows that the students included in the final dataset can be considered broadly representative of the whole population. Analysis presented below are therefore not weighted on the basis of the probability of inclusion in the final dataset. Weighted analyses were carried out but did not reveal any substantial impact on the main findings.

Analysis overview

Before addressing the main analysis to provide an estimate of the impact of unconditional offers on A level attainment, it was useful to retrieve a detailed description of the students in our dataset. This was necessary to contextualise the analysis and to allow a better interpretation of the main results. The analysis was therefore structured in steps.

The first step involved retrieving a set of descriptive statistics on unconditional offers, both from the perspective of the institutions that are making them, and from the students receiving, accepting them, and accepting them as a firm or insurance choice.

In the second step, a regression analysis was performed to allow a more in-depth analysis of the factors affecting the probability of an offer being unconditional (set of models A) and the probability of a student receiving at least one unconditional offer (set of models B). These logistic regression models were fitted on the dataset pulling together data from 2017 and 2018 so that it was possible to consider whether

unconditional offers had been more prevalent in 2018 than in 2017. Models A differ from models B in terms of the unit of analysis, which is the 'offer' for models A and the 'student' for models B. Consequently, the exact specifications of the two models also differ slightly from one another.

The third step comprised the main analysis, a number of regression models to evaluate the potential impact of unconditional offers on A level attainment (set of models C). The analysis focused on:

- i. overall A level attainment, considered across the three subjects taken by each student. This takes a (quasi) normal distribution and is investigated through linear multilevel regressions
- ii. A level attainment in specific subjects, focusing on the probability of achieving two key grades, C and A, or above. Here, the analysis was based on multilevel logistic regressions run separately for the following subjects: art and design, biology, business, mathematics, and psychology. This selection was intended to cover a range of disciplines (STEM, creative and applied), while considering subjects with relatively high numbers of entries and where a meaningful proportion of unconditional offers were made.

In both cases, different regression specifications were used to study the effect of receiving an unconditional offer, accepting it, and accepting it as a firm choice.

Table 1 details the specific variables used in each of the separate regression models, along with their dataset of origin and a schematic representation of how they are used in the analysis. Table 1 highlights the wealth of characteristics available for students, their prior schooling and socio-economic background. It also shows that information on students' motivation and aspirations are not directly observable in the data, although indirectly and only partially captured by the observed variables. For this reason, in interpreting the findings of the analysis below, it is important to remember that the estimates of the regression coefficients will only represent measures of associations, once other factors are controlled for, and not necessarily causal effects.

Table 1. A description of the variables and their use in the different sets of regression models (A, B, C).

Variable	Source	Description	A	B	C
Is UO	UCAS	Binary variable where a value of “1” indicates that an offer was unconditional and a value of “0” indicates that an offer was conditional.	DV		
Received UO	UCAS	Binary variable where a value of “1” indicates that a student received at least one unconditional offer and a value of “0” indicates that a student did not receive any unconditional offers.		DV	IV
Accepted UO	UCAS	Binary variable where a value of “1” indicates that a student accepted at least one unconditional offer, as either a firm or insurance choice, and a value of “0” indicates that a student did not accept any unconditional offers.			IV
Accepted UO as firm choice	UCAS	Binary variable where a value of “1” indicates that a student firmly accepted at least one unconditional offer and a value of “0” indicates that a student did not firmly accept any unconditional offers.			IV
Achieved A level	Exam board	Numerical variable representing either the sum of three A level scores where grades A*-E are scored 7-2 respectively (e.g. A level results of AAA would be scored 6+6+6 = 18) for models on overall attainment, or a 0-1 indicator for whether a grade C/A (or above) was achieved for subject level models.	Included	Included	DV
Predicted A level	UCAS	Numerical variable representing the sum of three predicted A level scores where grades A*-E are scored 7-2 respectively, eg predicted A level results of AAA would be scored 6+6+6 = 18.	Included	Included	
Difference (pred-ach)	UCAS, Exam board	Numerical variable representing the difference between a student’s predicted (pred) and achieved (ach) A level scores calculated as predicted A level score minus achieved A level score.	Included	Included	
Mean GCSE	Exam board	Numerical variable representing the average of a student’s GCSE scores where grades A*-G are scored 8-1 respectively, eg 3 GCSE results of AAB would be averaged to $(7+6+5)/3 = 6$.	Included	Included	Included
Additional AS	Exam board	Binary variable where “1” indicates that a student studied for an additional AS as well those in their A level subjects. “0” indicates that a student did not study for an additional AS.	Included	Included	Included
AS in subject	Exam board	Binary variable where “1” indicates that a student studied an AS in the A level subject modelled.			Included (ii. only)
Year	All	Binary variable where “1” indicates that a student sat A levels in 2018 and “0” indicates that a student sat A levels in 2017.	IV	IV	Included
Gender	NPD, UCAS	Binary variable where “1” indicates that a student is male and “0” indicates that a student is female.	Included	Included	Included
FSM	NPD	Binary variable where “1” indicates that a student is eligible for free school meals (FSM) and “0” indicates that a student is ineligible for free school meals.	Included	Included	Included
IDACI	NPD	Numerical variable indicating the decile into which a student’s IDACI score falls where decile one represents the lowest IDACI score (lowest probability of deprivation).	Included	Included	Included

Table 1 (continued). A description of the variables and their use in the analysis

Variable	Source	Description	A	B	C
Ethnicity	NPD	Binary variable where “1” indicates that a student is identified as white and “0” indicates that a student is identified as another (non-white) or unknown ethnicity.	Included	Included	Included
High tariff	UCAS	Binary variable where “1” indicates that an offer was made by a higher tariff university and “0” indicates that an offer was made by a medium or lower tariff University.	Included		
Centre	UCAS	Categorical variable indicating the type ¹² of the school or centre through which a university application was submitted.	Included	Included	Included
UK region	UCAS	Categorical variable indicating the region of the UK wherein the school or centre was located.	Included	Included	Included
A level Specialism	Exam board	Categorical variable indicating any specialisation in a student’s A level subjects ¹³ .	Included	Included	Included
Degree subject	UCAS	Categorical variable summarising the subject area of an application based on JACS 3.0 Principal Subject Codes used by the Higher Education Statistics Agency .	Included		
NCN	UCAS	National Centre Number. A categorical variable identifying the specific school or centre through which a university application was submitted.		Cluster	Cluster
UCI	Exam board	Unique Candidate Identifier. A categorical variable identifying individual students.	Cluster		
Provider code	UCAS	Categorical variable identifying the specific University or HE provider to which an application was made.	Cluster		

Note: Blank cells indicate that a variable was not present in the designated model. IV indicates that a variable was the independent variable in the designated model, and DV indicates that a variable was the dependent variable in the designated model.

¹² ‘Colleges’ refers to Agricultural and Horticultural Colleges, Technical Colleges, and Tertiary Colleges. ‘Other’ refers to Schools of Art and Design, Performing Arts schools, Language schools, Special schools and centres of unknown type. All other centre types are as named.

¹³ A level subjects were grouped into the following categories used by Bramley (2014): Applied (business studies, health & social care, law, leisure, physical education, travel & tourism), Expressive (art and design subjects, design and technology, drama, music, performing and expressive arts), Humanities (classical subjects, communication studies, critical thinking, economics, English, English language, English language & literature, English literature, general studies, geography, history, media/film/tv studies, political studies, psychology, religious studies, sociology), Language (French, Spanish, German, other modern languages), STEM (biology, chemistry, computing, engineering, ICT, mathematics, further mathematics, other sciences, physics, science). A student was considered to be specialised if two or more of their A level subjects fell within the same category. If all three of a student’s A level subjects fell within different categories then they were not considered to have specialised.

University offers at a glance

This section provides a statistical description of the prevalence of unconditional offers, both from the perspective of the university making them and the students receiving and accepting them. We also consider differences between 2017 and 2018 and the acceptance rates of unconditional offers. Below, all the statistics presented are based on our data and refer to our final sample, as described in the previous section.

Unconditional offers: types and rise

Table 2 shows that the number of unconditional offers increased by over 80% between 2017, when nearly 29,000 offers were unconditional, and 2018, when nearly 53,000 offers were unconditional (when any type of unconditional offer is considered). It should be noted, however, that the overall number of offers also significantly increased in 2018. As a result, the proportion of unconditional offers rose by around 50% between 2017 and 2018, from just over 8% to almost 12% of the total number of offers. When only offers that resolved to be unconditional are considered (either because they were direct unconditional or conditional unconditional that were accepted as a firm choice), these accounted for 4.5% and 6% of the total amount of offers.

Table 2 also shows that conditional unconditional offers made up the majority of unconditional offers, both in 2017 and in 2018. The number of conditional unconditional offers increased by 92% to over 32,000 in 2018, from almost 17,000 in 2017. This can be compared to an increase of 71% in the number of direct unconditional offers.

As described above, individual students may receive multiple offers. Table 3 shows that over 27% of all applicants in 2017 received at least one unconditional offer, increasing to 36% in 2018. These percentage figures are in line with those published by UCAS (2019) and provide additional evidence that students in our data are representative of the entire population of applicants. In absolute terms this represents over 40,000 students receiving at least one unconditional offer in 2018 compared to almost 24,000 in 2017. When only offers that resolved to be unconditional are considered, the number of students who received at least one unconditional offer increased from 14,420 (~17%) in 2017 to 24,033 (~22%) in 2018.

Table 2. Unconditional offers in 2017 and 2018, by type of offer

	2017	2018
All offers	354,063	455,953
Number of offers which resolved to unconditional (by June 30 th)	15,956	27,304
Percentage of offers which resolved to unconditional (by June 30 th)	4.5%	6.0%
Number of unconditional offers (any)	28,666	52,732
Percentage of unconditional offers (any)	8.1%	11.6%
Number of direct unconditional offers	11,839	20,335
Percentage of direct unconditional offers	3.3%	4.5%
Number of conditional unconditional offers	16,827	32,397
Percentage of direct unconditional offers	4.8%	7.1%

Note: The number of direct and conditional unconditional offers may not match the overall number of unconditional offers. For a small number of both conditional and unconditional offers it is unknown whether or not they were initially conditional unconditional offers. These have been considered when comparing conditional offers with unconditional offers but were not included in the comparisons between direct and conditional unconditional offers.

Table 3. Students applying to university in 2017 and 2018, by type of offer received

	2017	2018
All students	86,236	111,027
Number of students with at least one offer that resolved to be unconditional (by June 30 th)	14,420	24,033
Percentage of students with at least one offer that resolved to be unconditional (by June 30 th)	16.7%	21.6%
Number of students with at least one unconditional offer	23,538	40,193
Percentage of students with at least one unconditional offer	27.3%	36.2%
Number of students with at least one direct conditional offer	10,709	17,789
Percentage of students with at least one direct conditional offer	12.4%	16.0%
Number of students with only conditional unconditional offers	12,829	22,404
Percentage of students with only conditional unconditional offers	14.9%	20.2%

Table 4. University offers and acceptance rates in 2017 and 2018

	2017	2018
Conditional offers made	325,397	403,221
Conditional offers accepted	141,041	172,068
Conditional offers acceptance rate	43%	43%
Conditional offers accepted as firm choice	73,862	89,964
Conditional offers accepted as insurance choice	67,179	82,644
Unconditional offers made	28,666	52,732
Unconditional offers accepted	16,352	28,748
Unconditional offers acceptance rate	57%	55%
Unconditional offers accepted as firm choice	9,830	17,734
Unconditional offers accepted as insurance choice	6,522	11,014
Resolved to unconditional offers made	15,956	27,304
Resolved to unconditional offers accepted	12,385	21,267
Resolved to unconditional offers acceptance rate	78%	78%
Resolved to unconditional offers accepted as firm choice	9,769	17,610
Resolved to unconditional offers accepted as insurance choice	2,616	3,657
All offers made	354,063	455,953
All offers accepted	157,393	201,356
All offers acceptance rate	45%	44%
All offers accepted as firm choice	83,692	107,698
All offers accepted as insurance choice	73,701	93,658

Although unconditional offers comprise a modest proportion of the total number of offers made to students, Table 4 shows that they are more likely to be accepted (57% in 2017, 55% in 2018) than conditional offers (43% in both years).

Unconditional offers are also more likely to be accepted as a firm choice (60% of acceptances in 2017, 62% in 2018) than conditional offers (51% of acceptances in both years). When only offers that resolved to be unconditional (either because unconditional in the first place or conditional unconditional offers that were accepted as a firm choice) are considered, acceptance rates rise to 78% for both 2017 and 2018. Again, the majority of these offers resolved to be unconditional were accepted as a firm choice (79% in 2017 and 83% in 2018). This shows that among students in our final sample who receive an unconditional offer, the vast majority accept the offer, often as a firm choice.

A further inspection of the data (not reported here) also revealed that over 14% of firm acceptances and almost 20% of eventual student placements originated from an

unconditional offer (either direct or conditional unconditional). When considering only those offers that resolved to be unconditional at the June 30 deadline, these represent almost 12% of firm acceptances and 19% of eventual student placements.

Who is making unconditional offers?

Not all universities make use of unconditional offers in the same way, as outlined previously in this report. Universities can be divided into three groups according to the average number of UCAS points achieved by students attending those universities. The groups are referred to as 'high', 'medium' or 'low' tariff providers. Figure 2 shows the percentage of offers made by UCAS university tariff. Among high-tariff providers only 3.4% and 3.3% of offers were unconditional in 2017 and 2018, respectively. In contrast, medium tariff providers made 10.8% (2017) and 17.0% (2018) of their offers as unconditional offers, while lower tariff providers made 13.8% (2017) and 20.3% (2018) of their offers as unconditional offers. This trend reflects figures published by UCAS (see UCAS, 2018; 2019).¹⁴

Figure 2 shows that not only are the medium and low tariff universities more likely to make an unconditional offer, but also that for these two groups (and specifically for low tariff universities), there is a considerable increase in the proportion of unconditional offers being issued between 2017 and 2018. Again, this reflects figures published by UCAS (2018; 2019).

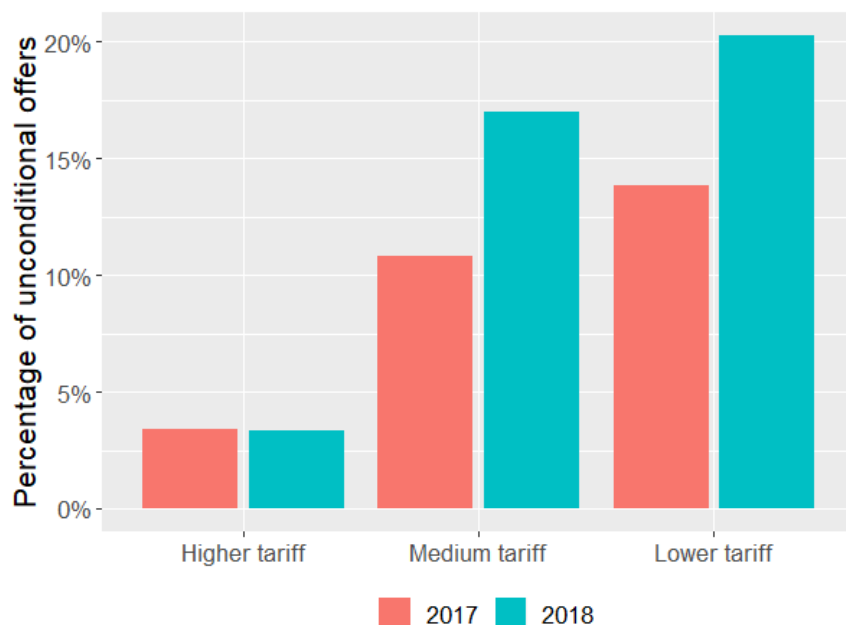


Figure 2. Proportion of unconditional offers, by university tariff

¹⁴ Note that the UCAS figures referred to earlier in this report were for 2019 though.

Unconditional offers are also not uniformly distributed amongst students applying to different subject areas. Figure 3 shows the proportion of offers that were unconditional among all the offers made for each degree subject area. Mass communication and documentation subjects, and creative arts and design had the highest proportion of unconditional offers in both 2017 and 2018, while engineering, mathematical sciences, and subjects allied to medicine had the lowest proportion. This is in line with findings published by UCAS (2019). A further investigation of the data revealed that all degree subject groups, except for languages and veterinary science, agriculture and related subjects, showed a statistically significant increase in the proportion of offers that were unconditional between 2017 and 2018.

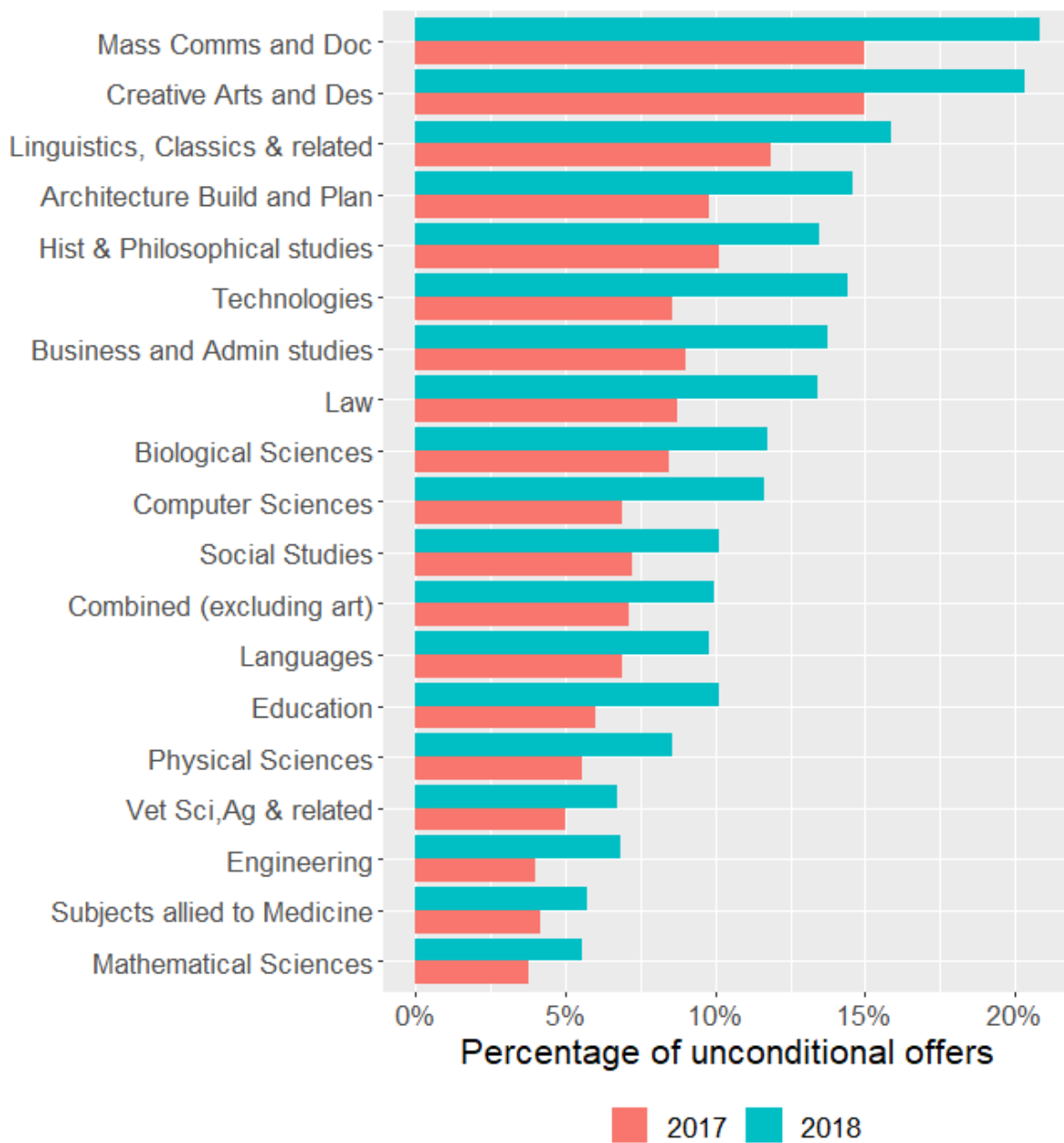


Figure 3. Proportion of unconditional offers, by degree subject area

Who is receiving unconditional offers?

Prior evidence suggests that not all students are equally likely to receive an unconditional offer. There are characteristics of students that can make them more or less likely to receive an unconditional offer.

Descriptive statistics

Table 5 compares the GCSE and A level attainment of students who received at least one unconditional offer with those who received only conditional offers. When any unconditional offer is considered, only very small differences are found. When only offers which resolved to be unconditional are considered, however, it becomes apparent that students receiving unconditional offers tend to have lower results than those not receiving unconditional offers, both at GCSE (6.3 in 2017 and 6.2 in 2018 compared to 6.5 in both years) and at A level (13.6 in 2017 and 13.1 in 2018 compared to 14.4 in both years).

Students receiving unconditional offers, whether only those that resolved to be unconditional or not, also missed their predicted grades by a greater amount (regardless of the breakdown of unconditional offers). This aligns with previous findings reported by UCAS (2019).

Table 6 displays the A level subject specialism, separately for students with and without unconditional offers (for students receiving offers that resolved to be unconditional, see Appendix B). Students who received at least one unconditional offer were more likely to have studied two or more expressive subjects, and somewhat more likely to have specialised in humanities than students who did not receive any unconditional offers. Conversely, students who received unconditional offers were less likely to have studied two or more STEM subjects.

Table 5. GCSE and A level attainment of students, by type of offer received

a. Any unconditional offer			
Measure of attainment	At least one unconditional offer	2017	2018
Mean GCSE	Yes	6.4	6.4
Mean GCSE	No	6.4	6.5
Attained A level score	Yes	14.3	13.9
Attained level score	No	14.2	14.2
Predicted A level score	Yes	16.6	16.4
Predicted A level score	No	16.3	16.5
Difference (pred. – att.)	Yes	2.3	2.5
Difference (pred. – att.)	No	2.1	2.2
b. Offers resolved to be unconditional			
Measure of attainment	At least one unconditional offer	2017	2018
Mean GCSE	Yes	6.3	6.2
Mean GCSE	No	6.5	6.5
Attained A level score	Yes	13.6	13.1
Attained level score	No	14.4	14.4
Predicted A level score	Yes	16.1	15.8
Predicted A level score	No	16.4	16.6
Difference (pred. – att.)	Yes	2.5	2.7
Difference (pred. – att.)	No	2.0	2.2

Table 6a. Offers received by students' A level subject specialism in 2017

A level subject specialism	No unconditional offers	At least one unconditional offer
Applied	2%	2%
Expressive	2%	4%
Humanities	44%	56%
Languages	1%	1%
STEM	39%	23%
None	11%	13%

Table 6b. Offers received by students' A level subject specialism in 2018

A level subject specialism	No unconditional offers	At least one unconditional offer
Applied	1%	2%
Expressive	2%	4%
Humanities	42%	54%
Languages	1%	1%
STEM	43%	25%
None	12%	14%

Note: Percentages are computed by year and by whether at least one conditional offer was received.

Table 7 displays socio-demographic characteristics of students with at least one unconditional offer, compared to those who received only conditional offers (for students receiving offers that resolved to be unconditional, see Appendix B). Among those receiving unconditional offers, more were female. Measures of deprivation did not seem to be strongly associated with receiving unconditional offers, and the proportion of students receiving or not receiving an unconditional offer were similar both in the highest and lowest of the five IDACI deciles. Free school meal eligibility was similar among those students who did and did not receive unconditional offers, and the relative proportion of students who were white was higher among those receiving unconditional offers compared to those who did not.

Table 7. Socio-demographic characteristics of students, for those receiving any unconditional offer

Characteristic	At least one unconditional offer	2017	2018
Gender: Male	Yes	37%	38%
Gender: Male	No	46%	47%
IDACI: Highest five deciles	Yes	29%	29%
IDACI: Highest five deciles	No	30%	30%
FSM: Eligible	Yes	2.9%	2.7%
FSM: Eligible	No	3.1%	2.9%
Ethnicity: White	Yes	81%	78%
Ethnicity: White	No	74%	70%

Note: Percentages are computed by year and by whether at least one conditional offer was received.

Regression analysis

A regression analysis can help consider the characteristics of students that make them more or less likely to receive an unconditional offer, once other factors are controlled for (i.e., once everything else remains constant). The analysis below concerns any type of unconditional offers. (See Appendix B for the analysis focussing only offers that resolved to be unconditional.)

Table 8 focuses on the factors of main interest and shows the estimates of the multilevel logistic regression for the probability that an offer is unconditional, considering distinct offers made to students as the unit of analysis. This allows us to include characteristics of the offer, such as university tariff and degree subject area, in addition to student-level characteristics. Offers made to students with higher predicted A level scores were significantly more likely to be unconditional: an increase in predicted A level attainment of one grade corresponds to almost a 66% increase in the odds that an offer is unconditional. Similarly, a greater difference between predicted and attained A level scores was associated with offers being unconditional, with a one-point score difference leading to a 2.4% increase in the odds that the offer is unconditional.

Although this has to be interpreted cautiously, this may suggest that the higher the over-prediction of A level grades, the higher the likelihood of receiving an unconditional offer. It is also interesting to note that, once all other available characteristics at student- and university-level are controlled for, offers were almost 86% more likely to be unconditional in 2018 than in 2017. Although this only refers to two years, this finding seems to suggest that, at least in 2018, unconditional offers were not only becoming increasingly more popular, but also that they were more frequently used by the same type of universities and for the same type of students that were already receiving unconditional offers.

The estimates for the probability of an offer being unconditional were generated while controlling for a range of variables that also affect unconditional offer making (see Figure 4 for full results). Students' prior attainment at GCSE, socio-demographic characteristics, and A level subject choices all significantly influenced unconditional offer making. Significant effects were also found between higher tariff universities and medium or lower tariff institutions, and between degree subjects. The type of centre at which students studied their A levels did not significantly affect the likelihood of receiving an unconditional offer.

Table 8. Multilevel logistic regression estimates for the probability that an **offer is made unconditional** – main factors

	Odds ratio	Upper CI	Lower CI
Predicted A level score	1.657	1.664	1.650
Difference (Pred. - Att.)	1.028	1.031	1.025
Year: 2018	1.876	1.898	1.853

Note: Confidence intervals (CI) are computed with a 95% level of significance.

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

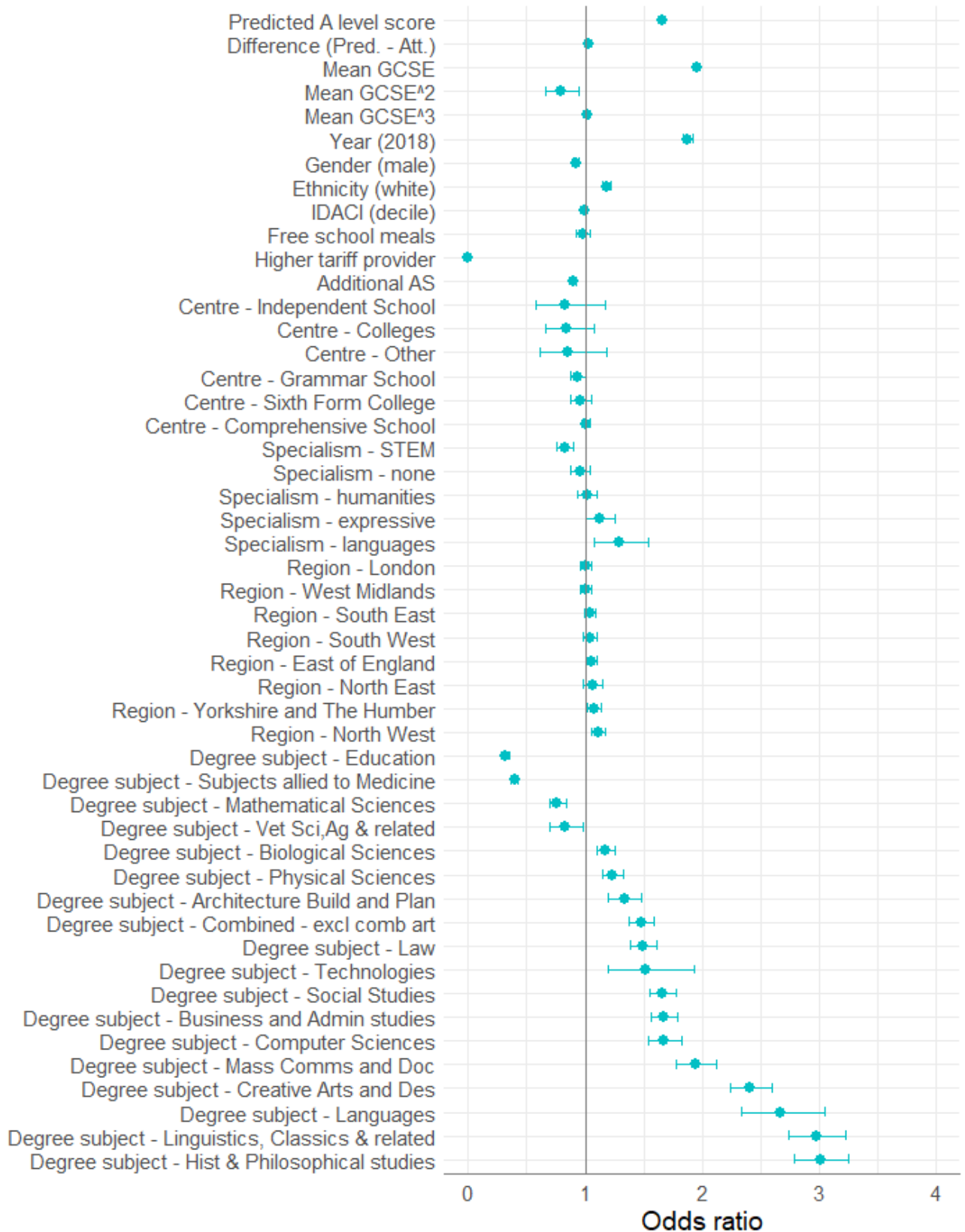


Figure 4. Multilevel logistic regression estimates for the probability that an offer is made unconditional – graphical representation

Our other analyses consider the likelihood of a student receiving an unconditional offer. Table 9 presents the effects of the main factors that influence the probability of receiving an unconditional offer, as determined by a logistic regression model considering individual students (who may each receive multiple offers) as the unit of analysis. Similar to the findings at offer level (Table 8), the estimates of this model show that, once other factors are controlled for, students were 57% more likely to receive an unconditional offer in 2018 than in 2017. In this case, however, the impact of predicted A level scores is smaller in size than in the offer-level analysis (an increase of one grade in one subject corresponds to a 10% increase in the odds that a student received at least one unconditional offer). A greater difference between predicted and attained A level scores was associated with receiving unconditional offers, suggesting that over-predicted A level grades may be associated with students being marginally more likely to receive unconditional offers, though the size of the effect is very small. Among the other factors controlled for, it was found that students' GCSE results, socio-demographic characteristics, A level subject choices, and the type of centre at which students studied their A levels all significantly influenced the likelihood that a student received at least one unconditional offer (see Figure 5 for full results of the regression analysis).

Table 9. Multilevel logistic regression estimates for the probability that a **student receives an unconditional offer** – main factors

	Odds ratio	Upper CI	Lower CI
Predicted A level score	1.104	1.112	1.096
Difference (Pred. - Att.)	1.059	1.065	1.053
Year: 2018	1.570	1.610	1.530

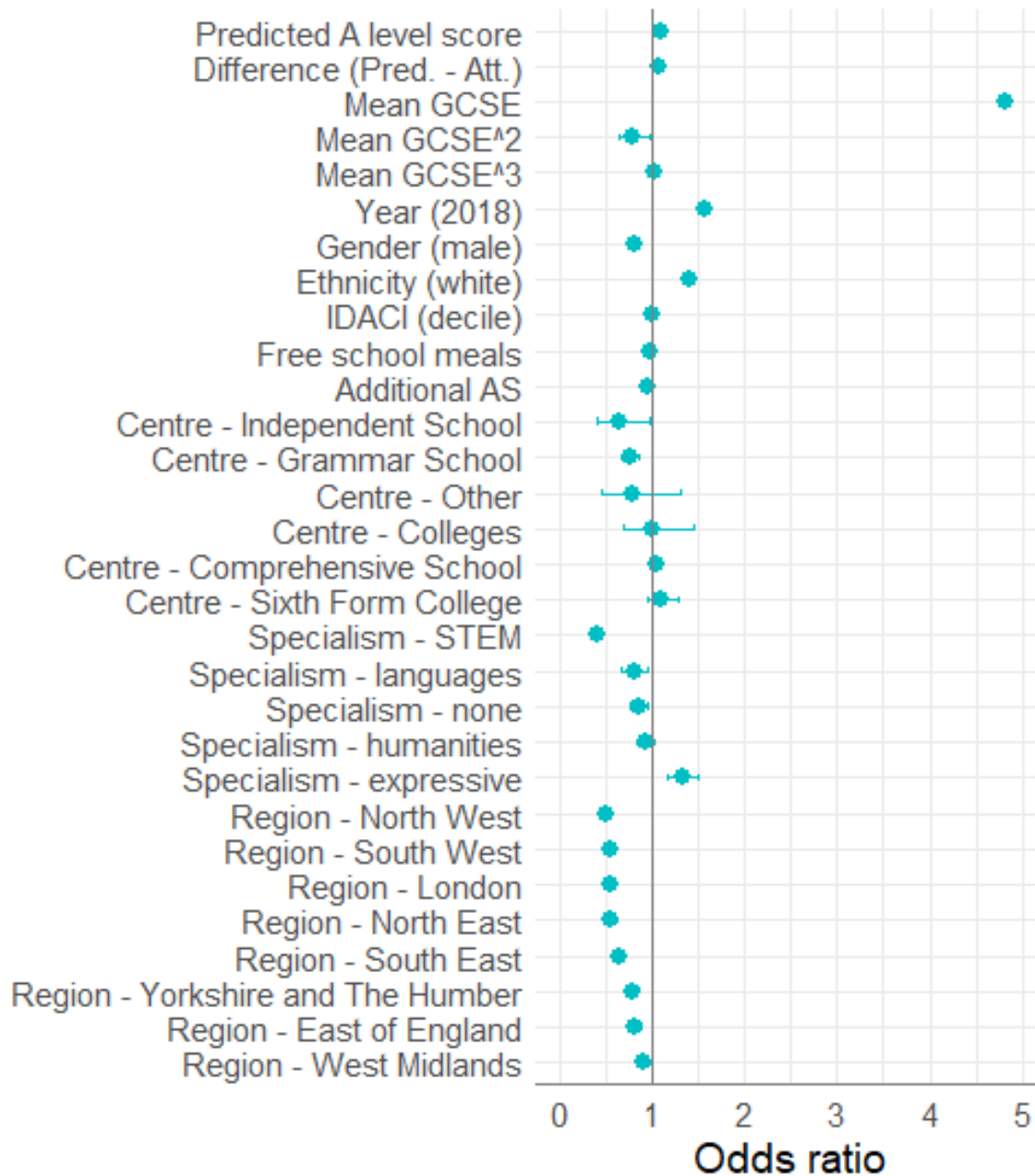


Figure 5. Multilevel logistic regression estimates for the probability that a **student receives an unconditional offer** – graphical representation

The impact on A level attainment

This section reports the findings related to how students receiving unconditional offers perform in their A levels, the main research question addressed by this study. Below, we consider the role of unconditional offers on (i) overall A level attainment across three A levels, and (ii) results achieved in specific A level subjects. The

analysis also considers differences by the type of unconditional offers and between 2017 and 2018.

For each strand of analysis we fitted three different models:

- Model 1 (M1): focussing on the role of **receiving an unconditional offer** (as opposed to **not** receiving any UO), regardless of whether this was accepted or not
- Model 2 (M2): focussing on the role of **accepting an unconditional offer and of receiving but rejecting it**, regardless of whether it was accepted as a firm or insurance choice
- Model 3 (M3): focussing on the role of **accepting an unconditional offer** as a firm choice or as an insurance choice.

In all models, observed factors potentially affecting students' overall A level attainment and the probability of receiving an unconditional offer have been accounted for (as detailed in Table 1). Below, only the main findings of the regression analyses are presented; full results are reported in Appendix C.

Overall A level attainment

To analyse the relationship between unconditional offers and overall performance across 3 A levels, each of the 3 A level grades achieved by each student has been converted onto a numerical scale. In the multilevel linear regression models, the sum of these 3 numerical scores is considered as the dependant variable, which varies between 6 and 21 (relating to 3 A levels at grade E through to 3 A levels at grade A*). In this way, it is possible to directly interpret the results in terms of A level grades, in that an estimate of 1 unit corresponds to an average change of 1 grade.

Table 10 shows the estimates of the impact of receiving at least one unconditional offer, as opposed to only receiving conditional offers (M1). These results suggest that the impact of *receiving* an unconditional offer depends on the type of offer. Receiving any type of unconditional offer does not seem to yield an effect on A level attainment, yet receiving direct unconditional offers and offers that resolved to be unconditional are negatively associated with A level attainment. This impact is statistically significant, though small in size: on average, students receiving direct unconditional offers and offers that resolved to be unconditional underperform with respect to those receiving conditional offers by less than half a grade (across 3 A levels, not in each of them). A very different result was found when considering receiving conditional unconditional offers, for which the impact was positive. These mixed findings can, at least partly, be explained by the nature of the different type of offers. More importantly, however, it should be recalled that M1 only captures the average impact of receiving an offer, regardless of whether that offer has been accepted or not.

Table 10. Regression estimates for the role of **receiving an unconditional offer** on overall A level attainment (**M1**), by type of offer

Type of UO received	Coeff.	Std. Er.	Sign.
Any UO	-0.016	0.016	
Direct UO	-0.387	0.021	**
Conditional Unconditional	0.296	0.020	**
Resolved to unconditional	-0.447	0.018	**

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001. All regression models are controlling for other potential factors affecting A level performance.

In this respect, results for M2 reported in Table 11 are more relevant to our main research question, as they unpack the impact of unconditional offers by considering whether the offer was accepted or not. Findings are consistent across the different types of unconditional offers: students *receiving and accepting* an unconditional offer tend to underperform with respect to those receiving conditional offers. The impact of accepting an unconditional offer on A level attainment is statistically significant across all types of unconditional offers, though smaller in size for conditional unconditional offers (slightly above one third of a grade) than for all the other types (nearly two thirds of a grade). This finding suggests that, once other factors are controlled for, accepting an unconditional offer has a negative impact on A level attainment, irrespective of the type of unconditional offer.

Table 11 also shows the impact of receiving but rejecting an unconditional offer. Interestingly, this seems to have a positive, though not always statistically significant impact, on A level attainment. It could only be speculated that this is because students who receive an unconditional offer but reject it feel strongly motivated to perform well in their A levels, possibly to meet their conditional offer. In any case, these findings provide a potential explanation for the mixed results showed by M1 for the impact of receiving an unconditional offer, which could be somewhat considered as a weighted average of the impact of accepting and rejecting an unconditional offer. Considering the results of M1 alone could therefore be potentially misleading.

The results for M3 reported in Table 12 allow us to consider further the impact of unconditional offers on overall A level attainment. First, Table 12 confirms the findings presented for M2 (Table 11): accepting an unconditional offer is negatively associated with A level performance, regardless of the type of unconditional offer received. Second, it becomes apparent that the negative impact of accepting an unconditional offer is larger when it becomes the student's firm choice. Although this result is perhaps not unexpected, our analysis allows us to quantify such an impact: depending on the type of unconditional offer received, this varies between 0.4 of a grade (for offers resolved to be unconditional) and 0.8 of a grade (for conditional

unconditional offers). Third, when an unconditional offer is accepted as an insurance choice, its effect is still negative, but smaller in size than when it is accepted as a firm choice (with the exception of conditional unconditional offers that if accepted as an insurance choice do not have any impact).

Table 11. Regression estimates for the role of **accepting and rejecting an unconditional offer** on overall A level attainment (**M2**), by type of offer

Type of UO	Decision	Coeff.	Std. Er.	Sign.
Any UO	Rejected	0.403	0.024	**
Any UO	Accepted	-0.629	0.027	**
Direct UO	Rejected	0.144	0.039	**
Direct UO	Accepted	-0.694	0.043	**
Conditional Unconditional	Rejected	0.503	0.027	**
Conditional Unconditional	Accepted	-0.377	0.034	**
Resolved to unconditional	Rejected	0.081	0.041	
Resolved to unconditional	Accepted	-0.625	0.044	**

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001. All regression models are controlling for other potential factors affecting A level performance.

Table 12. Regression estimates for the role of **accepting an unconditional offer** as a firm or insurance choice on overall A level attainment (**M3**), by type of offer

Type of UO	Decision	Coeff.	Std. Er.	Sign.
Any UO	Rejected	0.403	0.024	**
Any UO	Insurance	-0.107	0.034	**
Any UO	Firm choice	-0.806	0.032	**
Direct UO	Rejected	0.143	0.039	**
Direct UO	Insurance	-0.297	0.056	**
Direct UO	Firm choice	-0.536	0.048	**
Conditional Unconditional	Rejected	0.503	0.027	**
Conditional Unconditional	Insurance	0.041	0.041	
Conditional Unconditional	Firm choice	-0.803	0.045	**
Resolved to unconditional	Rejected	0.082	0.041	*
Resolved to unconditional	Insurance	-0.304	0.059	**
Resolved to unconditional	Firm choice	-0.384	0.047	**

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001. All regression models are controlling for other potential factors affecting A level performance.

Given the rise in unconditional offers over time, it is interesting to explore how the impact of unconditional offers on A level performance changed between 2017 and 2018. This can be achieved by adding an interaction term between year and the key variables (i.e., receiving, accepting, or accepting an unconditional offer as a firm choice) in each of the regression models considered (M1, M2 and M3). Findings of this analysis for any type of unconditional offers are reported in Table 13.

Overall, interaction terms between receiving/accepting/accepting as a firm or insurance choice and year are always negative, suggesting that, with respect to 2017, in 2018 there is an additional negative impact on students' A level grades. In other words, students' A level grades seem to be impacted by accepting any type of unconditional offer in 2018 more than in 2017.

More specifically, focussing on M2 first, the estimates of the coefficients associated with accepting an unconditional offer show that, despite a negative and significant effect in 2017 (-0.553), the impact became even stronger in 2018 (-0.678 = -0.553 - 0.125). Second, for receiving but not accepting an unconditional offer, the sign of the direct effect (0.488) is different from the sign of its interaction term (-0.152). This means that receiving but not accepting an unconditional offer has a positive impact on A level performance, greater in 2017 (0.488) than in 2018 (0.336 = 0.488 - 0.152).

Table 13. Regression estimates for changes over time in the role of unconditional offers on overall A level attainment – any type of unconditional offers

Model	Year	Offer/Decision	Coeff.	Std. Er.	Sign.
M1	2017	Received	0.119	0.024	**
M1	2018	Received	-0.234	0.031	**
M2	2017	Rejected	0.488	0.037	**
M2	2017	Accepted	-0.553	0.042	**
M2	2018	Rejected	-0.152	0.048	**
M2	2018	Accepted	-0.125	0.054	**
M3	2017	Rejected	0.490	0.037	**
M3	2017	Accepted as insurance	-0.078	0.053	
M3	2017	Accepted as firm	-0.751	0.050	**
M3	2018	Rejected	-0.154	0.048	**
M3	2018	Accepted as insurance	-0.050	0.068	
M3	2018	Accepted as firm	-0.086	0.065	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001. All regression models are controlling for other potential factors affecting A level performance.

A level performance in selected subjects

To explore whether the role of unconditional offers on A level attainment varies across subjects we used multilevel logistic regressions. We focused on 5 subjects: art and design, biology, business, maths and psychology. In this case, the dependent variable is the probability of attaining at least a certain grade in a subject. The two grades considered here are A (Table 14) and C (Table 15).

Table 14 reports the odds ratios associated with the main factors of interest for the likelihood of attaining a C (or above) and based on M3, with interactions to consider changes over time (for the full results of M3 see Appendix C). In all subjects there is a negative effect of accepting an unconditional offer as a firm choice, such that those students are approximately 50% to 80% less likely to achieve a grade C. This impact is statistically significant in 4 out of 5 subjects (with the exception of art and design), possibly due to smaller sample size. Maths is the only subject among those considered for which this effect is significantly greater in 2018 than in 2017. Students receiving but not accepting unconditional offers are between 46% and 110% more likely than students who don't receive an unconditional offer to achieve a grade C across all subjects.

Table 15 reports the odds ratios associated with the main factors of interest for the likelihood of attaining a grade A (or above), again based on M3 with interaction to capture changes in effect over time. Similar to the results for grade C, biology, business, maths and psychology all show a significant effect of accepting an unconditional offer as a firm choice, such that students are approximately 43% to 58% less likely to achieve a grade A. In business this effect is significantly greater in 2018 than in 2017. Art and design, business, and psychology all show an increased likelihood of achieving a grade A (ranging from 33% to 43%) for those students receiving but not accepting an unconditional offer.

Table 14. Odds ratios from the multilevel logistic regression for the **probability of attaining grade C or above** in selected subjects

Subject	Year	Offer/Decision	Odds ratio	Sign.
Art & Design	2017	Rejected	2.104	***
Art & Design	2017	Accepted as insurance	0.794	
Art & Design	2017	Accepted as firm	0.782	
Art & Design	2018	Rejected	0.859	
Art & Design	2018	Accepted as insurance	0.788	
Art & Design	2018	Accepted as firm	1.151	
Biology	2017	Rejected	1.464	***
Biology	2017	Accepted as insurance	0.764	
Biology	2017	Accepted as firm	0.503	***
Biology	2018	Rejected	0.856	
Biology	2018	Accepted as insurance	1.197	
Biology	2018	Accepted as firm	0.965	
Business	2017	Rejected	1.520	***
Business	2017	Accepted as insurance	0.914	
Business	2017	Accepted as firm	0.640	*
Business	2018	Rejected	1.058	
Business	2018	Accepted as insurance	0.963	
Business	2018	Accepted as firm	1.005	
Maths	2017	Rejected	1.489	***
Maths	2017	Accepted as insurance	0.779	
Maths	2017	Accepted as firm	0.561	***
Maths	2018	Rejected	0.829	
Maths	2018	Accepted as insurance	1.289	
Maths	2018	Accepted as firm	0.739	*
Psychology	2017	Rejected	1.684	***
Psychology	2017	Accepted as insurance	0.784	
Psychology	2017	Accepted as firm	0.568	***
Psychology	2018	Rejected	0.829	
Psychology	2018	Accepted as insurance	1.326	
Psychology	2018	Accepted as firm	0.891	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001. All regression models are controlling for other potential factors affecting A level performance.

Table 15. Odds ratios from the multilevel logistic regression for **the probability of attaining grade A or above** in selected subjects

Subject	Year	Offer/Decision	Odds ratio	Sign.
Art & Design	2017	Rejected	1.430	***
Art & Design	2017	Accepted as insurance	0.941	
Art & Design	2017	Accepted as firm	0.810	
Art & Design	2018	Rejected	0.862	
Art & Design	2018	Accepted as insurance	1.037	
Art & Design	2018	Accepted as firm	0.817	
Biology	2017	Rejected	1.111	
Biology	2017	Accepted as insurance	1.069	
Biology	2017	Accepted as firm	0.527	***
Biology	2018	Rejected	0.803	
Biology	2018	Accepted as insurance	0.861	
Biology	2018	Accepted as firm	1.114	
Business	2017	Rejected	1.368	***
Business	2017	Accepted as insurance	1.066	
Business	2017	Accepted as firm	0.418	***
Business	2018	Rejected	0.922	
Business	2018	Accepted as insurance	0.771	
Business	2018	Accepted as firm	1.682	*
Maths	2017	Rejected	1.055	
Maths	2017	Accepted as insurance	0.989	
Maths	2017	Accepted as firm	0.544	***
Maths	2018	Rejected	0.825	*
Maths	2018	Accepted as insurance	0.941	
Maths	2018	Accepted as firm	1.021	
Psychology	2017	Rejected	1.326	***
Psychology	2017	Accepted as insurance	0.867	
Psychology	2017	Accepted as firm	0.572	***
Psychology	2018	Rejected	0.950	
Psychology	2018	Accepted as insurance	1.006	
Psychology	2018	Accepted as firm	0.946	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001. All regression models are controlling for other potential factors affecting A level performance.

Discussion

Summary of key findings

This research considered the potential impact of unconditional university offers on students' A level attainment. The key finding suggests that, when controlling for factors related to A level attainment, there is an impact of holding an unconditional offer as a firm choice on students' overall A level attainment. This equated to students achieving, on average, between half and three quarters of a grade lower across 3 A levels (i.e., up to a quarter of a grade per subject). Furthermore, while the findings were mixed for individual A level subjects, in general, there was a negative relationship between holding an unconditional offer as a firm choice and attainment in that subject, once factors potentially affecting attainment were accounted for.

Our findings also considered the factors associated with students receiving an unconditional offer, and an offer being unconditional. The key findings show that students were more likely to receive an unconditional offer if they were applying to university in 2018 than 2017. Furthermore, students studying expressive subjects at A level (e.g., art and design) were more likely to receive an unconditional offer (potentially due to the nature of these courses), and students studying STEM subjects (e.g., maths and science) were less likely to receive an unconditional offer, when compared to those studying applied subjects (e.g., business). The findings were similar when considering the likelihood of an offer being unconditional. This analysis also revealed that an offer was more likely to be unconditional if the application was to a lower tariff University or to certain degree subject areas. For example, an offer was less likely to be unconditional if the application was to a maths, medical or veterinary science related subject (when compared to applications for engineering related subjects).

The findings from our analyses add to and extend previous research, both in relation to the potential impact of unconditional offers on A level attainment, and the likelihood of a student receiving an unconditional offer or an offer being unconditional. Previous research (e.g., see UCAS, 2019) suggests that a student holding an unconditional offer is more likely to miss their predicted grades than a student holding a conditional offer, suggesting a potential impact on attainment. As we have already discussed though, predicted grades tend to over-estimate how a student will perform, so these results must be interpreted with caution. Our findings therefore add to this debate, suggesting that students holding an unconditional offer as a firm choice do tend to perform worse at A level than those not holding an unconditional offer as a firm choice.

We also know from existing reports (e.g., see UCAS, 2019) that unconditional offers are not randomly distributed across A level students applying to university. Rather, some students are more likely to receive unconditional offers than others, and some offers are more likely to be unconditional. Primarily, this is related to the institution and degree course that students are applying to. Our findings broadly reflect those previously published: an offer is more likely to be unconditional if the application is to a lower tariff University and to certain degree subject areas.

It is worth reflecting briefly on our finding that students are more likely to receive an unconditional offer if they have higher predicted A level grades. We know from previous evidence that the relationship between predicted grades and unconditional offers changed over time. Historically, unconditional offers tended to be more common for students with relatively high predicted grades, but over time there has been a shift towards unconditional offers being more common for students with lower predicted grades (though to some extent this is likely to be a reflection of the providers that were making such offers). For example, in 2018, students predicted to achieve 11 points¹⁵ (equivalent to grades BBC) were most likely to receive an unconditional offer, while students predicted to achieve 15 points were most likely to receive an unconditional offer in 2014 and 2015. While our findings might seem at odds with these changes over time, it is important to note the differences in our analyses. We have considered the likelihood of a student receiving an unconditional offer according to their predicted grades and have not considered how this relationship changed over time. However, it is plausible that unconditional offer-making changed such that students with lower predicted grades were increasingly more likely to receive an unconditional offer – but that it was still students with higher predicted grades that were more likely to receive an unconditional offer.

Limitations

There are a number of limitations to consider when interpreting the findings of this research, some of which have already been discussed. First, due to the nature of our analyses, we cannot be certain that there is a casual relationship between accepting an unconditional offer as a firm choice and lower A level attainment. It could be the case that students accepting an unconditional offer as a firm choice were more likely to under-perform at A level anyway, potentially due to them having lower motivation, aspirations or other unobserved factors linked to attainment. Indeed, this could have influenced their decision to accept an unconditional offer. Therefore, it might not necessarily be the act of accepting the unconditional offer that has impact on attainment. However, the findings presented in this report can be interpreted as measures of associations, once a broad range of factors known to impact on

¹⁵ Note that grades are converted to points such that A* = 6, A = 5, B = 4 and so on.

attainment are accounted for. This is a common limitation of empirical research, given the difficulty of observing all the potential factors affecting the outcome of interest. The approach we took is commonly referred to as selection on observables.

A second limitation relates to the sample of students that are included in this research and there are 2 issues to consider here. First, we have chosen to focus on what we consider to be 'typical' A level students applying to university. That is, students who studied 3 A levels in England in Year 13, applied to start university after their A levels, and applied through the main UCAS scheme. It is possible that the students that we have excluded (i.e., those doing more or fewer A levels) react differently to receiving an unconditional offer than those in our sample, and had they been included, the findings would be different. While it is important to bear this in mind, it should be noted that the majority of 18-year-olds in England studying A levels do take 3 subjects, so this limitation should not be over-stated.

A second issue relates to the students that could not be matched across datasets. To some extent, some loss of data is inevitable when matching across datasets, particularly where there is no unique identifier on which to undertake the matching and a combination of variables must be used instead, as is the case here. Further, without combining data from multiple sources, we could not have been undertaken the analyses we have done here. It is therefore reassuring that our analyses suggest that our final sample is reasonably representative of our target group, and that the main findings were not affected by the use of weights, computed on the basis of the probability of inclusion in the sample. Moreover, some of the descriptive statistics presented in this report can be referenced against those previously reported by UCAS, which can be taken as an indication that the loss of data due to matching has not been systematic and therefore is unlikely to have significantly biased our findings.

Implications of findings

Our findings provide evidence of the potential impact of unconditional offers on students' A level attainment, and can be considered at both the individual and cohort level. At the individual level, the potential impact of unconditional offers could be relatively large, since it could be up to around three quarters of a grade across 3 A levels (or around a quarter of a grade per subject). Under-performing at A level to this extent might impact on an individual's future prospects (beyond university) and accepting an unconditional offer might also affect university performance or whether a student completes their university course (e.g., see OfS, 2020b; 2022).

At the cohort level, however, the effect is likely to be small. This is because the effect we have estimated is *only* for students that accept an unconditional offer as their firm choice, which we know is a minority of students (i.e., only a quarter of students

received an unconditional offer in 2019, and not all of these students accepted the unconditional offer as a firm choice; UCAS, 2019).

Our motivation for conducting this research was to consider the potential implications of unconditional offers for student's A level attainment. However, the context has changed considerably since we conducted our analyses – the coronavirus (COVID-19) pandemic resulted in summer A level exams being cancelled in both 2020 and 2021 and the approach to awarding grades was different to typical years; OfS (2020a) banned the use of conditional unconditional offers for a period during the pandemic and subsequently, Universities UK published a code of practice for fair admissions that discourages institutions from making certain types of unconditional offers in particular circumstances (UUK, 2022); DfE consulted on changes to the admission system to higher education in England; and the number of unconditional offers declined significantly (UCAS, 2023). While the context has therefore changed, our findings provide evidence relating to the potential impact of unconditional offers on students' A level attainment that can contribute to any future debate about the use of unconditional offers, or the system of university admissions in England more broadly.

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Appendix A - Representativeness of the data

The linking procedure and the restriction on ‘typical’ students resulted in the exclusion of a portion of individuals from the final sample. This means that there is a possibility that the resulting sample may not be representative of the overall population of University applicants.

To consider this, a regression model was used to investigate the probability of a student who was present in the original UCAS dataset being included in the final sample. Clearly, this restricted the investigation to the variables available in the UCAS dataset. The output of the regression reported in Table A.1 shows that students who received unconditional offers were not significantly more or less likely to be included in the final sample, but revealed a small (but significant) difference in predicted A level results: students with higher predicted scores, and with predictions for a greater number of A level subjects, were more likely to be included in the sample. This is not unexpected considering the restrictions applied to the initial sample. Additionally, this analysis suggested that the sample may not be fully geographically representative of the whole of the UK (with students from some regions slightly overrepresented than others) and that certain centres (such as independent schools and sixth form colleges) may be slightly overrepresented in the final sample.

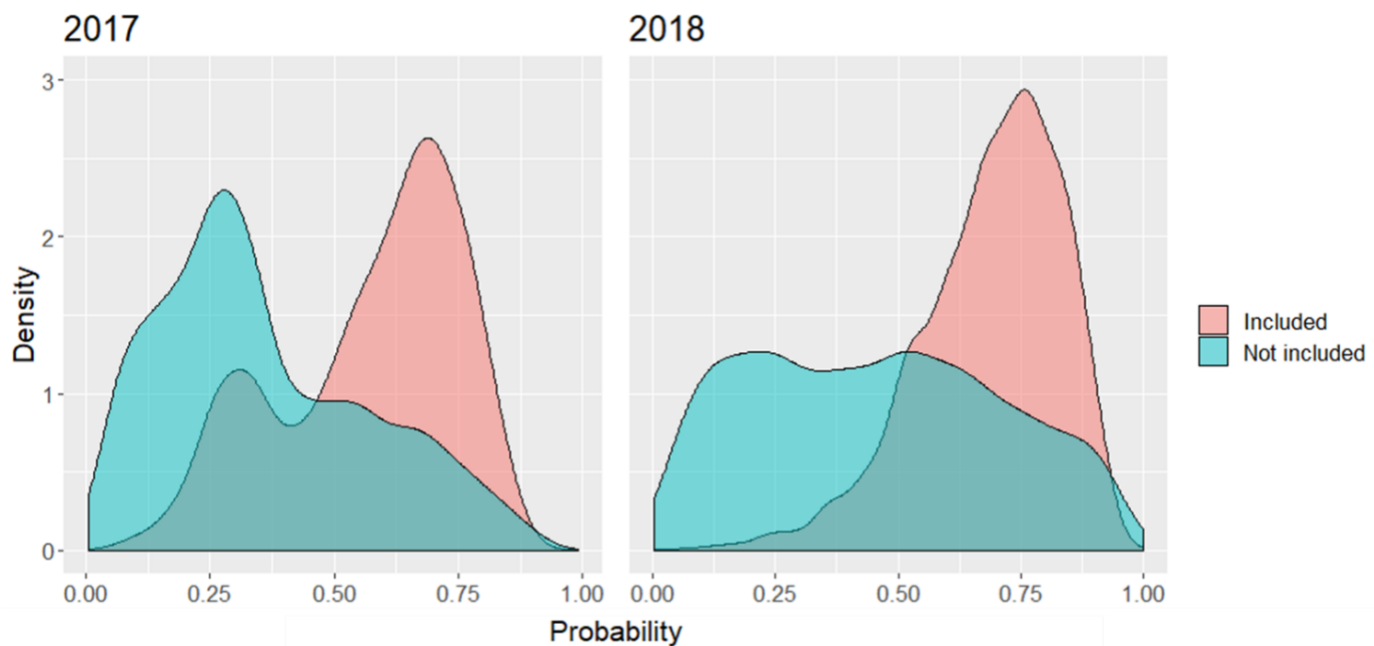


Figure A.1 Probability of inclusion in the sample – density of the distributions, separately for 2017 and 2018

Table A.1 Regression output for the probability of inclusion in the sample, by year

	2017			2018		
	Estimate	Std. Error	p-value	Estimate	Std. Error	p-value
(Intercept)	-2.902	0.066	***	-3.231	0.066	***
Received	-0.008	0.029		0.044	0.03	
Accepted	0.036	0.041		-0.005	0.044	
Firm choice	0.002	0.032		-0.014	0.035	
Mean predicted A level score	0.086	0.007	***	0.061	0.007	***
Number of predicted A levels	0.822	0.011	***	1.128	0.011	***
Gender	0.016	0.011		-0.014	0.012	
Centre - Colleges	-1.375	0.117	***	-0.941	0.111	***
Centre - Comprehensive School	0.018	0.047		-0.011	0.047	
Centre - Further Education	-0.296	1.083		-1.628	1.049	
Centre - Grammar School	-0.253	0.156		0.035	0.151	
Centre - Independent School	0.166	0.054	***	0.175	0.054	***
Centre - Other	-2.459	0.192	***	-2.444	0.189	***
Centre - Sixth Form College	-1.157	0.082	***	-0.457	0.079	***
Region - East of England	0.134	0.06	*	0.267	0.061	***
Region - London	0.111	0.057	*	0.361	0.057	***
Region - North East	0.183	0.096		0.035	0.095	
Region - North West	0.009	0.067		-0.002	0.066	
Region - South East	0.1	0.056		0.255	0.057	***

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Region - South West	0.152	0.067	*	0.203	0.067	***
Region - West Midlands	0.051	0.063		0.132	0.064	*
Region - Yorkshire and The Humber	0.113	0.068		-0.073	0.067	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

In order to evaluate these differences jointly, it is possible to derive, for each student, the predicted probabilities of inclusion in the final sample. Figure A.1 compares, separately for 2017 and 2018, the distributions of the predicted probabilities of being included in the sample for students actually included and for those not included in the final sample. If the final sample was perfectly representative of the original population, the two distributions would be very similar to one another. Although this is not the case, it is possible to see that, especially in 2017, there is sufficient overlap in the two distributions, suggesting that there are no particular groups of students that are not included in the final sample. Despite some students being more likely to be included in the analysis than others, which will have to be born in mind when interpreting the results, the final sample can be considered broadly representative of the whole population.

Appendix B - Additional description of students who received offers that resolved to be unconditional

Table B.1 Students' A level subject specialism, for those receiving an offer resolved to be unconditional

	2017		2018	
	At least one unconditional offer	No unconditional offers	At least one unconditional offer	No unconditional offers
Applied	2%	1%	2%	1%
Expressive	6%	2%	5%	2%
Humanities	57%	45%	55%	44%
Languages	1%	1%	1%	1%
Stem	14%	12%	15%	12%
None	21%	38%	22%	41%

Table B.2 Socio-demographic characteristics of students, for those receiving an offer that resolved to be unconditional

	2017		2018	
	At least one unconditional offers	No unconditional offers	At least one unconditional offers	No unconditional offers
Gender: Male	37%	45%	38%	45%
IDACI: Highest five deciles	30%	29%	29%	29%
FSM: Eligible	2.88%	3.03%	2.72%	2.85%
Ethnicity: White	83%	75%	80%	71%

Table B.3 Multilevel logistic regression estimates referred to offer that resolved to be unconditional

	Offer-level analysis			Student-level analysis		
	Estimate	Std. Error	*	Estimate	Std. Error	*
(Intercept)	-8.383	1.265	***	-3.47	1.427	*
Mean GCSE	0.104	0.624		0.768	0.712	
Mean GCSE²	-0.062	0.104		-0.067	0.118	
Mean GCSE³	0.007	0.006		0	0.006	
Predicted A level score	0.271	0.005	***	-0.009	0.004	*
Difference (Pred. - Att.)	0.074	0.003	***	0.101	0.003	***
Additional AS	-0.055	0.014	***	0.34	0.015	***
Gender (male)	-0.088	0.015	***	-0.038	0.016	*
Free school meals	-0.035	0.036		-0.183	0.016	***
Ethnicity (white)	0.247	0.02	***	-0.035	0.038	
IDACI (decile)	0	0.003		0.45	0.021	***
Centre - Colleges	-0.103	0.145		0.011	0.003	***
Centre - Comprehensive School	0.025	0.015	.	-0.051	0.207	
Centre - Grammar School	-0.074	0.043	.	0.049	0.023	*
Centre - Independent School	-0.172	0.217		-0.28	0.07	***
Centre - Other	-0.216	0.204		-0.381	0.246	
Centre - Sixth Form College	-0.124	0.057	*	-0.246	0.315	

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

Year: 2018	0.384	0.014	***	-0.015	0.088	
Specialism - expressive	0.298	0.064	***	0.565	0.067	***
Specialism - humanities	0.03	0.053		-0.022	0.057	
Specialism - languages	0.075	0.112		-0.267	0.109	*
Specialism - none	-0.02	0.055		-0.095	0.059	
Specialism - STEM	-0.148	0.056	**	-0.776	0.059	***
Region - East of England	0.032	0.027		-0.122	0.043	**
Region - London	-0.104	0.029	***	-0.625	0.042	***
Region - North East	0.015	0.047		-0.171	0.061	**
Region - North West	0.068	0.033	*	-0.457	0.049	***
Region - South East	0.004	0.028		-0.362	0.042	***
Region - South West	0.035	0.033		-0.356	0.047	***
Region - West Midlands	0.038	0.029		-0.09	0.045	*
Region - Yorkshire and The Humber	0.013	0.033		-0.081	0.049	
Higher tariff provider	-5.348	0.648	***	-	-	
Degree subject - Architecture Build and Plan	0.633	0.062	***	-	-	

Degree subject - Biological Sciences	0.073	0.042	.	-	-
Degree subject - Business and Admin studies	0.338	0.044	***	-	-
Degree subject - Combined - excl comb art	0.286	0.046	***	-	-
Degree subject - Computer Sciences	0.364	0.051	***	-	-
Degree subject - Creative Arts and Des	0.833	0.045	***	-	-
Degree subject - Education	-0.938	0.067	***	-	-
Degree subject - Hist & Philosophical studies	0.639	0.048	***	-	-
Degree subject - Languages	0.599	0.083	***	-	-
Degree subject - Law	0.24	0.048	***	-	-
Degree subject - Linguistics, Classics & related	0.686	0.051	***	-	-
Degree subject - Mass Comms and Doc	0.676	0.052	***	-	-
Degree subject - Mathematical Sciences	-0.215	0.065	***	-	-

Degree subject - Physical Sciences	0.129	0.047	**	-	-
Degree subject - Social Studies	0.24	0.044	***	-	-
Degree subject - Subjects allied to Medicine	-0.877	0.052	***	-	-
Degree subject - Technologies	0.555	0.131	***	-	-
Degree subject - Vet Sci,Ag & related	-0.219	0.111	*	-	-

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

Appendix C - The impact of receiving unconditional offers on A level attainment – full regression results

Table C.1.a Full regression output for results reported in Tables 10, 11 and 12.

	M1			M2			M3		
	Coeff.	Std. Er.	.	Coeff.	Std. Er.	.	Coeff.	Std. Er.	.
(Intercept)	-3.344	0.109	**	-3.273	0.109	**	-3.189	0.108	**
Mean GCSE	2.699	0.010	**	2.687	0.010	**	2.674	0.010	**
Received	-0.016	0.016		0.403	0.024	**	0.403	0.024	**
Accepted				-0.629	0.027	**	-0.107	0.034	**
Firm choice							-0.806	0.032	**
Year: 2018	-0.141	0.015	**	-0.14	0.015	**	-0.134	0.015	**
Additional AS	-0.133	0.016	**	-0.133	0.016	**	-0.135	0.016	**
Gender (male)	0.222	0.016	**	0.22	0.016	**	0.220	0.016	**
Free school meals	-0.168	0.038	**	-0.167	0.038	**	-0.167	0.038	**
Ethnicity (white)	0.298	0.020	**	0.306	0.02	**	0.317	0.020	**
IDACI (decile)	-0.043	0.003	**	-0.043	0.003	**	-0.043	0.003	**
Centre - Colleges	-0.838	0.308	**	-0.837	0.307	**	-0.847	0.305	**
Centre - Comprehensive	-0.100	0.040	*	-0.099	0.040	*	-0.098	0.040	*
Centre - Grammar	0.034	0.129		0.034	0.128		0.038	0.127	
Centre – Independent	-0.254	0.318		-0.246	0.317		-0.237	0.316	
Centre – Other	1.151	0.425	**	1.143	0.423	**	1.132	0.421	**
Centre - Sixth Form Coll.	0.253	0.147		0.244	0.146		0.227	0.145	
Specialism - expressive	1.049	0.077	**	1.085	0.077	**	1.093	0.077	**
Specialism - humanities	0.35	0.064	**	0.36	0.064	**	0.354	0.063	**
Specialism - languages	0.145	0.109		0.146	0.109		0.136	0.109	
Specialism - none	-0.496	0.066	**	-0.482	0.066	**	-0.486	0.066	**
Specialism - STEM	-0.770	0.065	**	-0.759	0.065	**	-0.762	0.065	**
Region - East of England	0.141	0.070	*	0.131	0.070		0.125	0.070	

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

Region - London	0.338	0.067	**	0.317	0.067	**	0.311	0.067	**
Region - North East	0.201	0.107		0.18	0.106		0.159	0.105	
Region - North West	-0.068	0.082		-0.076	0.082		-0.072	0.081	
Region - South East	0.147	0.068	*	0.133	0.068	*	0.132	0.067	*
Region - South West	0.153	0.079		0.148	0.079		0.154	0.078	*
Region - West Midlands	-0.111	0.074		-0.118	0.074		-0.119	0.074	
Region - Yorkshire and The Humber	0.060	0.081		0.054	0.081		0.052	0.080	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

Table C.1.b Full regression output for results reported in Tables 10, 11 and 12
continued i.

	M1			M2			M3		
	Coeff.	Std. Er.		Coeff.	Std. Er.		Coeff.	Std. Er.	.
(Intercept)	-3.127	0.109	**	-3.097	0.108	**	-3.058	0.108	**
Mean GCSE	2.662	0.011	**	2.656	0.011	**	2.651	0.011	**
Direct UO									
Received	-0.387	0.021	**	0.144	0.039	**	0.143	0.039	**
Accepted				-0.694	0.043	**	-0.297	0.056	**
Firm choice							-0.536	0.048	**
Cond. UO									
Received	0.296	0.02	**	0.503	0.027	**	0.503	0.027	**
Accepted				-0.377	0.034	**	0.041	0.041	
Firm choice							-0.803	0.045	**
Year: 2018	-0.142	0.015	**	-0.14	0.015	**	-0.137	0.015	**
Additional AS	-0.129	0.016	**	-0.13	0.016	**	-0.131	0.016	**
Gender (male)	0.22	0.016	**	0.22	0.016	**	0.219	0.016	**
Free school meals	-0.171	0.038	**	-0.17	0.038	**	-0.169	0.038	**
Ethnicity (white)	0.306	0.02	**	0.312	0.02	**	0.319	0.02	**
IDACI (decile)	-0.042	0.003	**	-0.042	0.003	**	-0.042	0.003	**
Centre - Colleges	-0.845	0.306	**	-0.855	0.305	**	-0.858	0.304	**
Centre - Comprehensive	-0.1	0.04	*	-0.099	0.04	*	-0.098	0.04	*
Centre - Grammar	0.035	0.128		0.035	0.127		0.036	0.127	
Centre – Independent	-0.248	0.316		-0.236	0.315		-0.23	0.315	
Centre – Other	1.138	0.422	**	1.133	0.421	**	1.126	0.42	**
Centre - Sixth Form Coll.	0.249	0.146		0.242	0.145		0.226	0.145	
Specialism - expressive	1.103	0.077	**	1.125	0.077	**	1.122	0.077	**
Specialism - humanities	0.355	0.064	**	0.363	0.063	**	0.356	0.063	**
Specialism - languages	0.132	0.109		0.133	0.109		0.125	0.109	
Specialism - none	-0.484	0.066	**	-0.474	0.066	**	-0.481	0.066	**
Specialism - STEM	-0.758	0.065	**	-0.747	0.065	**	-0.754	0.064	**

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

Region - East of England	0.144	0.07	*	0.136	0.07		0.13	0.069	
Region - London	0.325	0.067	**	0.312	0.067	**	0.308	0.066	**
Region - North East	0.253	0.106	*	0.228	0.105	*	0.208	0.105	*
Region - North West	-0.06	0.081		-0.064	0.081		-0.063	0.081	
Region - South East	0.144	0.067	*	0.136	0.067	*	0.135	0.067	*
Region - South West	0.174	0.079	*	0.169	0.078	*	0.17	0.078	*
Region - West Midlands	-0.123	0.074		-0.131	0.074		-0.129	0.074	
Region - Yorkshire and The Humber	0.081	0.08		0.075	0.08		0.069	0.08	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

Table C.1.c Full regression output for results reported in 10, 11 and 12 continued ii.

	M1			M2			M3		
	Coeff.	Std. Er.		Coeff.	Std. Er.		Coeff.	Std. Er.	.
(Intercept)	-3.169	0.109	**	-3.169	0.109	**	-3.172	0.108	**
Mean GCSE	2.687	0.01	**	2.687	0.01	**	2.687	0.01	**
Received	-0.447	0.018	**	0.081	0.041		0.082	0.041	*
Accepted				-0.625	0.044	**	-0.304	0.059	**
Firm choice							-0.384	0.047	**
Year: 2018	-0.118	0.015	**	-0.116	0.015	**	-0.113	0.015	**
Additional AS	-0.136	0.016	**	-0.138	0.016	**	-0.139	0.016	**
Gender (male)	0.209	0.016	**	0.208	0.016	**	0.209	0.016	**
Free school meals	-0.169	0.038	**	-0.169	0.038	**	-0.168	0.038	**
Ethnicity (white)	0.321	0.02	**	0.325	0.02	**	0.327	0.02	**
IDACI (decile)	-0.043	0.003	**	-0.043	0.003	**	-0.043	0.003	**
Centre - Colleges	-0.833	0.306	**	-0.833	0.306	**	-0.838	0.306	**
Centre - Comprehensive	-0.097	0.04	*	-0.096	0.04	*	-0.097	0.04	*
Centre - Grammar	0.021	0.128		0.022	0.128		0.023	0.128	
Centre – Independent	-0.265	0.317		-0.256	0.316		-0.256	0.316	
Centre – Other	1.13	0.423	**	1.123	0.422	**	1.124	0.422	**
Centre - Sixth Form Coll.	0.25	0.146		0.246	0.145		0.243	0.145	
Specialism - expressive	1.099	0.077	**	1.109	0.077	**	1.104	0.077	**
Specialism - humanities	0.349	0.064	**	0.356	0.064	**	0.354	0.064	**
Specialism - languages	0.126	0.109		0.131	0.109		0.13	0.109	
Specialism - none	-0.499	0.066	**	-0.492	0.066	**	-0.494	0.066	**
Specialism - STEM	-0.809	0.065	**	-0.801	0.065	**	-0.803	0.065	**
Region - East of England	0.129	0.07		0.123	0.07		0.121	0.07	
Region - London	0.302	0.067	**	0.296	0.067	**	0.294	0.067	**
Region - North East	0.192	0.106		0.167	0.106		0.151	0.106	
Region - North West	-0.097	0.082		-0.101	0.081		-0.103	0.081	
Region - South East	0.121	0.067		0.118	0.067		0.116	0.067	
Region - South West	0.129	0.079		0.124	0.079		0.124	0.079	
Region - West Midlands	-0.117	0.074		-0.122	0.074		-0.121	0.074	

**Region - Yorkshire and
The Humber**

0.055 0.08 0.049 0.08 0.046 0.08

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

Table C.2 Full regression output for results reported in Table 13

	M1			M2			M3		
	Coeff.	Std. Er.		Coeff.	Std. Er.		Coeff.	Std. Er.	
(Intercept)	-3.37	0.109	**	-3.298	0.109	**	-3.212	0.108	**
Mean GCSE	2.697	0.01	**	2.685	0.01	**	2.672	0.01	**
Received	0.119	0.024	**	0.488	0.037	**	0.49	0.037	**
Accepted				-0.553	0.042	**	-0.078	0.053	
Firm choice							-0.751	0.05	**
<i>Received x 2018</i>	-0.234	0.031	**	-0.152	0.048	**	-0.154	0.048	**
<i>Accepted x 2018</i>				-0.125	0.054	*	-0.05	0.068	
<i>Firm choice x 2018</i>							-0.086	0.065	
Year: 2018	-0.065	0.018	**	-0.063	0.018	**	-0.062	0.018	**
Additional AS	-0.134	0.016	**	-0.134	0.016	**	-0.135	0.016	**
Gender (male)	0.222	0.016	**	0.221	0.016	**	0.22	0.016	**
Free school meals	-0.168	0.038	**	-0.167	0.038	**	-0.166	0.038	**
Ethnicity (white)	0.299	0.02	**	0.308	0.02	**	0.318	0.02	**
IDACI (decile)	-0.044	0.003	**	-0.043	0.003	**	-0.043	0.003	**
Centre - Colleges	-0.835	0.308	**	-0.836	0.307	**	-0.845	0.305	**
Centre - Comprehensive	-0.1	0.04	*	-0.099	0.04	*	-0.099	0.04	*
Centre - Grammar	0.035	0.129		0.034	0.128		0.039	0.127	
Centre – Independent	-0.257	0.318		-0.249	0.317		-0.241	0.316	
Centre – Other	1.145	0.425	**	1.135	0.423	**	1.123	0.421	**
Centre - Sixth Form Coll.	0.254	0.147		0.244	0.146		0.227	0.145	
Specialism - expressive	1.045	0.077	**	1.081	0.077	**	1.089	0.077	**
Specialism - humanities	0.349	0.064	**	0.358	0.064	**	0.353	0.063	**
Specialism - languages	0.144	0.109		0.145	0.109		0.135	0.109	
Specialism - none	-0.495	0.066	**	-0.482	0.066	**	-0.485	0.066	**

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Specialism - STEM	-0.77	0.065	**	-0.76	0.065	**	-0.762	0.064	**
Region - East of England	0.143	0.07	*	0.133	0.07		0.127	0.07	
Region - London	0.34	0.067	**	0.318	0.067	**	0.312	0.067	**
Region - North East	0.201	0.107		0.18	0.106		0.16	0.105	
Region - North West	-0.067	0.082		-0.075	0.082		-0.072	0.081	
Region - South East	0.149	0.068	*	0.135	0.068	*	0.134	0.067	*
Region - South West	0.153	0.079		0.148	0.079		0.154	0.078	*
Region - West Midlands	-0.113	0.074		-0.121	0.074		-0.121	0.074	
Region - Yorkshire and The Humber	0.06	0.081		0.055	0.081		0.053	0.08	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

Table C.3 Full regression output for results reported in Table 14

	Art		Biology		Business		Maths		Psychology	
	OR	Sign	OR	Sign	OR	Sign	OR	Sign.	OR	Sign
(Intercept)	0.005	***	0.000	***	0.000	***	0.000	***	0.000	***
Mean GCSE	3.149	***	10.73 0	***	6.284	***	5.403	***	8.715	***
Received	2.104	***	1.464	***	1.520	***	1.489	***	1.684	***
Accepted	0.794		0.764		0.914		0.779		0.784	
Firm choice	0.782		0.503	***	0.640	*	0.561	***	0.568	***
Received:2018	0.859		0.856		1.058		0.829		0.829	
Accepted:2018	0.788		1.197		0.963		1.289		1.326	
Firm choice:2018	1.151		0.965		1.005		0.739	*	0.891	
Year: 2018	1.123		0.948		0.974		1.119	***	0.992	
Additional AS	0.967		0.989		1.366	***	0.926	*	1.153	***
Gender (male)	0.613	***	1.809	***	1.652	***	1.640	***	0.742	***
Free school meals	0.988		0.885		0.823		0.823		0.873	
Ethnicity (white)	1.236	*	1.387	***	1.106		1.027		1.023	

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IDACI (decile)	0.984	0.968	***	0.956	***	0.953	***	0.972	***
Centre - Colleges	349759	0.667		1.106		0.874		0.842	
Centre - Comprehensive School	0.856	0.952		1.056		0.953		0.974	
Centre - Grammar School	1.169	1.150		1.080		1.107		0.643	*
Centre - Independent School	1.189	0.639		9.612		0.649		1.005	
Centre - Other	385386	0.979		106938		1.362		2.532	
Centre - Sixth Form College	0.634	1.416		1.982	*	0.962		1.650	*
Specialism - expressive	2.411	2.264	*	0.583	*	1.235		0.683	
Specialism - humanities	1.716	1.412		1.229	*	1.182		1.297	
Specialism - languages	1.405	0.324	*	0.582		1.448		0.860	
Specialism - none	1.701	1.438		0.934		1.236		1.271	

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Specialism - STEM	1.664	3.732	***	0.621	***	2.239	***	1.487	***
Region - East of England	1.390	1.032		1.051		1.179		0.964	
Region - London	1.857	0.864	***	0.797		1.520	***	1.247	*
Region - North East	2.757	1.105	***	1.645	*	1.230		1.042	
Region - North West	2.342	0.805	***	1.105		0.933		1.049	
Region - South East	1.733	0.966	***	0.992		1.271	***	0.996	
Region - South West	2.075	1.102	***	1.225		1.192		1.030	
Region - West Midlands	1.508	0.715	*	0.987	***	0.931		0.915	
Region - Yorkshire and The Humber	1.347	0.984		1.061		1.060		1.019	

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.

Table C.4 Full regression output for results reported in Table 15

	Art		Biology		Business		Maths		Psychology	
	OR	Sign.	OR	Sign.	OR	Sign.	OR	Sign.	OR	Sign.
(Intercept)	0.000	***	0.000	***	0.000	***	0.000	***	0.000	***
Mean GCSE	3.222	***	19.106	***	6.787	***	6.092	***	10.794	***
Received	1.431	***	1.111		1.368	***	1.055		1.326	***
Accepted	0.941		1.069		1.066		0.989		0.867	
Firm choice	0.810		0.527	***	0.418	***	0.544	***	0.572	***
Received:2018	0.862		0.803		0.922		0.825	*	0.950	
Accepted:2018	1.037		0.861		0.771		0.941		1.006	
Firm choice:2018	0.817		1.114		1.682	*	1.021		0.946	
Year: 2018	1.039		0.951		1.006		0.970		0.897	*
Additional AS	1.109	*	0.686	***	0.962		0.536	***	0.862	***
Gender (male)	0.886	*	1.876	***	1.306	***	2.046	***	0.681	***
Free school meals	0.960		0.739		1.226		0.805		1.240	
				***				***		*
Ethnicity (white)	1.161	*	1.398	***	1.145		1.220	***	1.139	***
IDACI (decile)	0.978	*	0.953	***	0.959	***	0.963	***	0.974	***
Centre - Colleges	0.594		0.512		0.271		0.404	***	1.568	

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

Centre - Comprehensive School	0.817	0.933	0.997	1.013	0.969	

Centre - Grammar School	1.278	1.228	0.714	1.019	0.596	***
Centre - Independent School	1.565	0.809	1.094	1.383	0.365	
Centre - Other	1.435	1.573	4.259	2.757	0.836	*
Centre - Sixth Form College	0.461	1.169	1.510	1.130	1.317	*
Specialism - expressive	1.779	0.586	0.502	0.502	0.334	***
				*		*
Specialism - humanities	1.206	0.756	1.315	0.613	0.952	***
				*		*
Specialism - languages	1.606	0.105	0.529	0.568	0.534	*
			*			
Specialism - none	1.298	0.710	1.006	0.635	0.898	
Specialism - STEM	1.217	2.266	0.532	1.439	0.848	***
Region - East of England	1.377	0.964	1.050	0.974	0.987	*
	*					

University admissions and A level attainment in 2017 and 2018: the role of unconditional offers

Region - London	1.795	***	0.933	0.975	1.074	1.215
Region - North East	1.921	***	0.997	1.109	0.849	0.978
Region - North West	1.754	***	0.948	1.131	0.803	1.218
Region - South East	1.326	*	0.960	0.957	0.992	1.016
Region - South West	1.498	***	1.112	1.058	1.009	1.027
Region - West Midlands	1.125		0.879	0.981	0.839	1.034
Region - Yorkshire and The Humber	1.101		1.063	1.209	0.944	1.043

Note: Significance level indicated by *=0.05, **=0.01, ***=0.001.



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