Students' decision-making about A level Psychology

Jessica Bowyer & Prerna Carroll

A levels in England are moving from a modular to a linear system. Additionally, the AS and A level are being 'decoupled', meaning that students will no longer undertake summative assessment at the end of the first year of study. Psychology may be particularly vulnerable to these changes as students often have no prior experience of the discipline. 768 current A level Psychology students responded to an online questionnaire about their decision-making at A level. Whilst subject interest was the primary motivator at AS level, decision-making was significantly more pragmatic at A level, as prior and expected attainment were the most influential factors. Additionally, students reported receiving very little advice about studying Psychology. These findings suggest that uptake of A-level Psychology is likely to be negatively affected by qualifications reform, but it may be possible to counteract this by ensuring students are informed about the benefits of studying Psychology. Keywords: A level, decision-making, qualifications reform, uptake.

Background

ue to large-scale, ongoing qualifications reform in England, A level Psychology has been reformed for first teaching in 2015. The reforms mean that all A levels will move from a modular to a linear system, requiring that students take their exams at the end of the course, rather than throughout as is currently the case. Additionally, and importantly for the context of this study, AS and A levels are being 'decoupled', meaning that the AS level will become a stand-alone qualification and will no longer count towards a student's achievement in the overall A level.

The transition to a linear model has potential benefits for A level providers, teachers and students. A level teachers have previously cited the frequency of assessment at A level as a concern, stating that the volume of examinations reduced classroom time and led students to focus on module results, to the detriment of their ability to think holistically about the subject (Highton et al., 2012). Consequently, the transition to a linear model for A level has been welcomed by some providers, as there will be less frequent assessment over the two year course, especially with the removal of summative assess-

ment at the end of Year 12 (Association of Colleges, 2015).

Nevertheless, the decoupling of the AS and A level has caused concern about the potential effect this may have on the uptake of A level Psychology. Currently, Psychology is very popular at A level. In 2013, it was the third most popular A level subject and was taken by 19.4% of all A level candidates (Gill, 2014). Additionally, as Sutch and Zanini (2015) point out, Psychology has been one of the main beneficiaries of the introduction of the AS level in 2000. In 2001, Psychology accounted for 10.7% of all AS and A level entries, yet this figure has almost doubled to 19.1% in 2014. The AS level is particularly beneficial for subjects like Psychology as it offers students a reasonably risk-free opportunity to study a new discipline. The summative assessment at the end of the AS level allows students to gain a qualification even if they choose not to continue the subject onto A level, and as university offers are predominantly based on students' performance at A level, poor performance in a fourth AS level does not necessarily affect progression to Higher Education. Consequently, despite the subject's current popularity, there is a particular concern that Psychology is often a new subject to students at this level and

students may be reluctant to commit for the full two year A level course without the relative safety of AS.

Additionally, there is still no clear consensus about the provision that schools and colleges will offer students once qualifications reform is complete. Whilst presently the majority of students choose four subjects at AS and then continue three of these onto A level, some providers indicate that they will encourage students to choose three A levels without any additional AS subjects, with a significant number as yet undecided (UCAS, 2015). This uncertainty is exacerbated by the fact that A levels are being redeveloped in three 'Tranches', of which Psychology is in the first, meaning that providers will be required to teach a mixture of unreformed and new qualifications until September 2017.

A level provision will also be affected by the changes to state funding for 16-19 education. Previously, post-16 providers received funding for each qualification students were entered for. However, funding is now calculated per student, regardless of how many qualifications they study. Whilst the Department for Education have offered additional funding for students who study four full A levels, this has not been mirrored at AS level. Furthermore, the education budget has been protected for primary and secondary education, but this has not been the case for 16-19 and adult education (Association of Colleges, 2014). Subsequently, the Sixth Form Colleges Association (2015) reports that its members have experienced an average annual decrease in funding of £317,964. This has direct implications for subject provision, both in terms of the specific subjects offered and the number of subjects students are able to take. 72 per cent of sixth form colleges report that they have been forced to drop courses due to funding restrictions, and 58 per cent have limited students' programme sizes (Sixth Form Colleges Association, 2015). It is unlikely that this situation will improve in the immediate future. If providers are restricting the

number of AS or A levels students can take, it seems likely that they will continue to move to a three A level system, and therefore fewer students will take a fourth AS.

A further concern is the transition of responsibility for careers advice and guidance from Local Authorities to individual schools from September 2012. Whilst the quality of provision has always been inconsistent between providers, these structural changes have compounded this variability and resulted in independent organisations such as Connexions and AimHigher losing their funding. This has caused concern that some students may not receive appropriate guidance about the transition to post-16 study, especially where they are required to change schools in order to study A levels. Indeed, the Education Select Committee (2013) warned that the quality of provision had deteriorated since these changes were introduced, and cautioned that the independence, impartiality and availability of careers advice were of concern. Furthermore, the National Careers Service website. a government-led service intended to provide centralised careers advice, only provides minimal information about A level study and no guidance on subject choice at this level.

In order to predict whether these changes to A level are likely to affect future uptake of Psychology, it would be useful to know exactly why current students choose the subject at AS and continue it onto A level. However, whilst research has been conducted investigating students' decision-making regarding post-16 study, this has not been with specific reference to Psychology.

Decision-making at A level

Prior research has shown that the greatest determinant of students' subject decisions in Further Education is prior enjoyment of the subject, if previously studied at GCSE, or interest in the discipline if the subject is new to the student (Blenkinsop et al., 2006; Garratt, 1985; Vidal Rodeiro, 2007). This is most likely to be the case if it is a Humanities subject, whilst the decision to study Mathematics or a Science subject is more likely to be moti-

vated by the subject's extrinsic value: how useful students believe the subject to be in preparing them for a future career (Garratt, 1985; Vidal Rodeiro, 2007). Garratt (1985) also found that female students were more likely to report being motivated by interest in the subject than male students, although it is not clear whether this simply reflects the pre-existing unequal gender distribution between the Humanities and Sciences.

An additional factor is prior attainment perhaps unsurprisingly, given the importance of A level results for admission to university. Davies et al., (2009) found that attainment at GCSE was the most powerful predictor of a student entering for A level in the same subject. Furthermore, Stables and Stables (1995) found that boys and the relatively least able were the most likely to cite ability as a factor in their decision-making. It is unclear whether ability or prior attainment is likely to be a key factor in the decision to study Psychology at A level, as very few students will have been able to take it at GCSE. Nevertheless, Sutch (2013) found that, in 2010, 34.8 per cent of students who took GCSE Psychology went on to take ASlevel Psychology, and this figure rose to 48.2 per cent of those who attained an A*-C at GCSE (the highest figure for any GCSE subject included in his analysis).

Furthermore, career and educational aspirations are key influences in students' decision-making. Given that A levels are high-stakes examinations and are used to determine entry to Higher Education and, in some cases, employment, this is perhaps unsurprising. The majority of Year 11 students that Blenkinsop et al. (2006) interviewed had made their post-16 decisions with direct consideration of university entry requirements and career aspirations. This is corroborated by Vidal Rodeiro (2007), where more than half of the A level students in the study had chosen a particular subject because it was an entry requirement for their desired university course.

There is also some evidence to suggest that the importance of career and education aspirations varies by school type and socioeconomic background. Baird, Rose, and

McWhirter (2012) found that students at Further Education (FE) colleges (typically attended by students from more deprived backgrounds) cited career goals more frequently, and education goals less frequently, than students at sixth form or tertiary colleges. They were also twice as likely to reference wealth as an aspiration than students at other colleges, and were more likely to aspire to skilled or semi-skilled manual roles. Similarly, Sullivan et al., (2010) found that students with graduate parents were less likely than those whose parents had not attended university to agree with statements about choosing GCSE subjects in order to fulfil course requirements and career aspirations. Rather than students from more privileged backgrounds trying to maximise their existing social advantage, 'concerns about future courses and jobs appeared to weigh more strongly with the less privileged respondents' (2010, p.18).

As Psychology is usually a completely new subject to students at A level, it seems likely that students' decisions will be primarily motivated by interest in the discipline. However, factors such as prior attainment and university entry requirements may be more influential when choosing to continue the subject in the transition from AS to A level. Consequently, this study sought to build a clear understanding of students' decisionmaking with regards to studying Psychology, including their reasons for continuing the subject after AS level. Additionally, due to concerns that students may not be receiving appropriate or adequate advice about choosing Psychology, we investigated which sources of advice students accessed when making these decisions, how useful these were, and whether the advice they received was positive or negative about Psychology as a discipline. Illuminating the decisionmaking process and the sources of advice students access may be useful in determining how qualifications reform will affect uptake at AS and A level, and may also provide teaching staff with more information about how to ensure students are appropriately informed about the benefits of choosing Psychology at A level.

We consequently sought to answer the following research questions:

- 1. Why do students choose Psychology at AS level, and why do they pursue it further at A level?
- 2. Do students originally intend to study Psychology for both years, or to drop it after AS level?
- 3. Which sources of advice do students access regarding studying Psychology at AS and A level? How useful, and how positive, is this advice?

Method

We developed two online questionnaires: one for students in Year 12, and one for students in Year 13¹. They comprised both multiple-choice and free-response questions and asked respondents about four areas (a full version of the Year 13 questionnaire can be found in Appendix A²):

- 1. AS level choices: five questions were asked about respondents' AS level choices, including whether they had previously taken a GCSE in Psychology, the subjects they had taken to AS level, and how important certain factors were in their decision to study Psychology specifically. They were also asked about their intentions to study Psychology after AS level and their reasons for the combination of subjects they had chosen.
- 2. A level choices: in the Year 13 questionnaire only, students were asked two questions about their current A level subjects and their reasons for continuing Psychology after AS level.
- 3. **Advice:** respondents were asked eight questions about the advice they received about studying Psychology, including

their sources of advice, how useful it was, how positive or negative the advice was, and if there is any information that they would have liked but did not receive. Additionally, they were asked about their intentions after finishing their A levels, including university subject where relevant, and if there were any other factors that had affected their A level choices.

4. **Personal information:** respondents were asked to answer some optional information about their parents' educational background and postcode in order to facilitate analysis based on socioeconomic data.

In line with the University of Cambridge's ethical guidelines, the research was not passed by an ethics board as the information gathered was non-sensitive and non-invasive and thus potential harm was considered to be minimal. Participants were not vulnerable and participation would not induce psychological stress or anxiety. Furthermore, full and informed consent was required for completion of the survey. Participants were not required to give any personal details and all data was anonymised. All data has been stored in line with the Data Protection Act.

Data collection

The questionnaires were distributed to students via email and social media. Providers in England and Wales offering A level Psychology were emailed and asked to distribute the questionnaires to students. Although the reforms will not affect Welsh schools, existing A levels are the same in both Wales and England and consequently it was felt that students' reasons for choosing Psychology would not be affected by country of residence. Where possible, subject

¹ Students do not necessarily have to take AS Psychology in Year 12, and may instead choose to take it in Year 13. However, as the majority of AS students will be in Year 12, in this report we use 'Year 12' to mean students currently taking AS and 'Year 13' to mean those currently taking A level.

 $^{^2}$ Only the Year 13 questionnaire is included as it is identical to the Year 12 questions, with some additional questions.

teachers were contacted directly but where this was not possible either the exams office or the general enquiries email was utilised. In total, 306 colleges and sixth forms were directly emailed to ask for their participation in the study. 71 centres replied to say that they would either forward the message on to the relevant member of staff or would ask their students to participate. Additional contact was made through social media (Twitter) using the official Cambridge Assessment account asking colleges to participate, but due to the nature of social media it is impossible to say how many schools this will have reached. It is not possible to determine a response rate as participants were not asked to state the school or college that they currently attend, in order to maintain their anonymity.

768 students participated in the study. 473 participants were currently studying Psychology at AS level, and 295 were studying it at A level. The majority of respondents were female (71.7 per cent), which is comparable to the gender split in the overall number of students taking AS or A level Psychology nationally. According to the Joint Council of Qualifications (2014), 74.9 per cent of students studying A level Psychology in 2014 were female.

Data

Demographic data

In order to facilitate contextual analysis, two sources of demographic data were collated about participants: their parents' highest qualifications and a deprivation index sourced from participants' postcodes.

Parental educational background

Participants were asked for their parents' highest qualifications. These are depicted in Table 1. Both mothers and fathers were most likely to have GCSE or equivalent as their

Table 1: Participants' parents' highest qualifications

Highest Qualification	Fathers %	Mothers %
GCSE/O levels/CSEs/School Certificate	25.1	21.2
A levels/ AS levels/ Higher School Certificate	10.1	12.6
First university degree (BA, BSc)	16.2	20.2
Higher university degree (MA, PhD, PGCE)	10.5	7.6
NVQ Level 1	0.3	.4
NVQ Level 2	6	1.1
NVQ Level 3	1.4	3.9
NVQ Level 4-5	.8	2.0
Other Qualification	5.0	5.4
No qualifications	4.6	6.2
Do not know	25.5	19.5

highest qualification, although in both cases more than a quarter held a first or higher degree.

For the purposes of analysis, this data was merged to determine whether either of a participant's parents held a first or higher degree. Data was available for 75.8 per cent of participants, and of these, 46 per cent had at least one parent with a first or higher degree.

Index of deprivation

Participants' postcodes, where given, were linked to a measure of deprivation for that area. The Income Deprivation Affecting Children Index (IDACI) provided by the Department for Communities and Local Government (DCLG) was utilised, which gives a measure of deprivation between 0 and 1, where 0 is the least deprived. The IDACI measures the proportion of children under 16 in a given area living in low income households, which includes households in receipt of Income Support or Jobseeker's Allowance. For example, a score of 0.2 indicates that 20 per cent of children under 16 in that area live in low income households.

The IDACI data was used to calculate a mean measure of deprivation for the whole sample, as well as to group participants into three levels of deprivation (low, medium or high) for the purposes of analysis. The sample was compared to the national IDACI rankings from 2010 compiled by the DCLG, in order to place participants' IDACI data in a national context. Consequently, a score of 0.10 or less was considered an area of low deprivation, between 0.10 and 0.26 an area of medium deprivation, and any score above this was considered to be an area of high deprivation. Data was available for 55.3 per cent of our participants. The mean IDACI score for our participants was 0.18 (SD= 0.16; min=0; max=0.79). Most participants were from areas of low deprivation. The frequency of participants in each level of deprivation is depicted in Table 2.

Table 2: Participants' levels of deprivation (IDACI)

Level of deprivation	Number of participants	Percentage
Low	174	40.9
Medium	155	36.5
High	96	22.6

Results

Intentions after A level

Respondents were asked what they intended to do after A level, by selecting one of a range of options. A significant majority, 82.7 per cent, intended to go to university. Of these, the majority intended to study Psychology at degree level, with 26.8 per cent of students selecting this option. However, responses demonstrate that students intended to go into a wide variety of courses, with Medicinerelated courses (e.g. Nursing or Midwifery) and the Humanities being popular choices. Very few participants reported that they intended to study Modern Foreign Languages or a Physical Science, most likely reflecting the low number of students nationally progressing to these subject areas.

Reasons for choosing Psychology at AS level

Both Year 12 and Year 13 participants were asked how influential certain factors had been in their reasons for choosing Psychology at AS level. They were asked to rate the importance of these factors on a scale of 1–4, where 1 was 'very important' and 4 was 'not at all important'.

The most important reasons for studying Psychology were:

- I thought it would be an interesting/ enjoyable subject
- It was a new subject for me and it sounded exciting
- I thought this was a good subject to have
- I thought this subject would be useful for my future career
- I thought I would do well in this subject.

Table 3: Participants' intentions after A level

Intended destination	Participants (%)
Go to university	82.7
Have not made up my mind yet	9.4
Go to college or institution of higher education	2.2
Get a job with training	1.8
Start vocational training	0.7
Get a job whether or not it offers training	0.5
Be unemployed by choice	0.4
Be unemployed and trying to get a job	0.3

Table 4: Participants' intended university subjects

Intended degree subject	Participants (%)
Psychology	26.8
Other	24.6
Humanities	15.8
Medicine-related	8.2
Other Social Science	7.6
Biological Sciences	5.1
Business-related	4.4
Medicine	2.9
Physical Sciences	1.8
Sociology	1.6
Modern Foreign Languages	0

Consequently, it appears that students' decisions to study Psychology at AS level were predominantly motivated by the interest value of the discipline, especially as it would be an entirely new subject for the majority of

participants. However, 88.2 per cent of participants who had studied Psychology at GCSE reported that their prior experience and enjoyment of the subject had been a 'very important' or 'important' factor in

their decision-making. This indicates that despite the low number of candidates, GCSE Psychology encourages uptake at AS and A level, as the high rate of progression between the two qualifications suggests (Sutch, 2013). Where prior attainment is not applicable, personal interest in Psychology as a discipline is a strong motivating factor.

Additionally, it is interesting that more students reported perceiving Psychology being useful for their future career than it being related to the university degree they wished to study. This indicates that students may perceive Psychology as having a wider use beyond admission to university. In particular, students who were planning to study Medicine or a subject allied to Medicine indicated that the subject being related to their career was very important or important (86.6% and 83.9% respectively), but did not perceive it as being particularly relevant to their undergraduate studies.

Interestingly, despite our concerns that Psychology may be chosen as an additional fourth AS level, rather than one of a student's core three subjects, very few students reported taking Psychology as their fourth or fifth AS level subject. Furthermore, whilst the majority of students thought they would do well in the subject, very few reported that they thought it would be an easy subject. This suggests that participants believed that Psychology would suit their academic skill-sets rather than assuming it would be inherently easy.

Participants reported that parental and teacher advice, timetabling concerns and friends were not important factors in their decision-making. Additionally, neither gender nor parental educational background had any significant effect on the importance of different factors. However, a chi-square test of independence showed that students from areas of high and medium deprivation were significantly more likely to have been influenced by timetabling concerns (χ 2=14.17, N=267, p=.03). Without knowledge of the type of schools these students attend, it is difficult to know why this is. It may be the case that these students attend schools that are unable to offer more flexible timetables due to teaching availability and funding restrictions, and there-

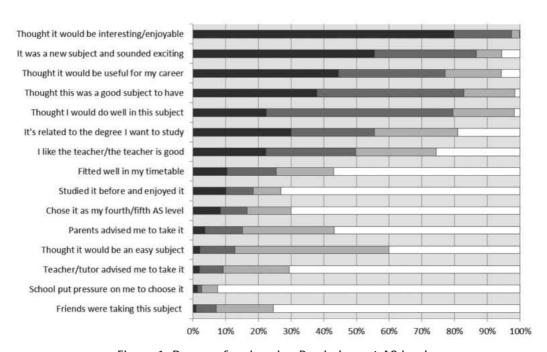


Figure 1: Reasons for choosing Psychology at AS level

fore students' subject options are more restricted than those in more affluent areas.

Reasons for continuing Psychology to A level

Intentions to continue

Due to our interest in the role of the AS level in determining students' continuation to the full A level, students in Year 12 were asked whether they intended to continue Psychology next year. Additionally, students in Year 13 were asked whether they originally intended to continue with Psychology after AS level when they began the course.

Table 5: Intentions to continue Psychology after AS level

Year Group Intention		Number of students	Percentage
Year 12	Yes	403	85.2%
Teal 12	No	70	14.8%
Year 13	Yes	253	85.8%
Teal 13	No	40	13.6%

The data indicates that a substantial majority of Year 12 students plan to continue studying Psychology after AS. Year 12 students who did not intend to continue Psychology after AS level were also significantly more likely to have reported choosing it as fourth or fifth subject (χ 2=94.6, N=461, p=.000).

Additionally, the Year 13 data is particularly interesting as 13.6 per cent reported that they did not originally plan to continue studying Psychology after AS level. This indicates that the AS level may affect students' decisions after Year 12, either due to higher than expected enjoyment of the discipline, or better than anticipated performance in AS examinations.

Continuing Psychology to A level

In order to determine the reasons behind students' decisions to continue studying Psychology in Year 13, participants were asked to rate how important certain factors were in their decision-making. The scale was the same as for AS, 1–4, with 1 being 'very important'.

The five most important factors were:

 I thought I would do well in this subject at A level

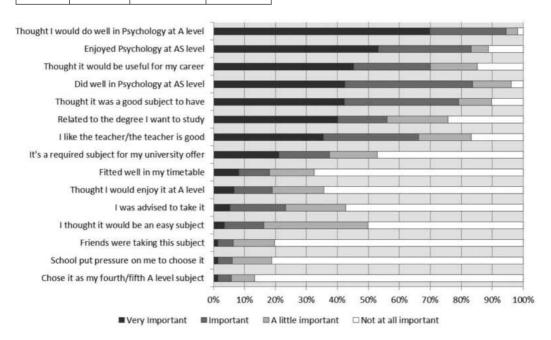


Figure 2: Reasons for continuing Psychology to A level

- I enjoyed the subject at AS level
- I did well in this subject at AS level
- I thought this was a good subject to have
- I thought this subject would be useful for my career

The data suggests that there was a substantial shift in focus in participants' decision-making at A level, moving from an interest in the subject to prior and expected performance. This indicates that students' decisions at A level are more pragmatic than at AS level and intended to maximise future achievement. In particular, participants reported that prior performance at AS and the belief that they would do well in Psychology at A level were very important factors. It should be noted that prior performance is more likely to be a factor here than at AS because of the very low proportion of students who had taken GCSE Psychology. However, participants were considerably more likely to rate expected performance as a 'very important' factor at A level than at AS. This is unsurprising, given the importance of A level grades for admission to university courses.

However, what is more surprising is that whilst participants reported that enjoyment of the subject at AS was a very important factor, over 60 per cent stated that thinking they would enjoy the subject at A level was not at all important. This suggests that participants had enjoyed AS Psychology, but did not perceive enjoyment at A level to be as important as attainment, further compounding the idea that the decision-making process had become more focused on future achievement.

Additionally, participants reported that it was important that Psychology was related to their future career and their university subject. This reflects the fact that whilst 30.6 per cent of respondents indicated that they wished to study undergraduate Psychology, a number of students wished to study subjects where knowledge of Psychology may be useful, such as subjects allied to Medicine or other Social Sciences. Participants were also more likely to report that Psychology was

important for their career than their degree subject, suggesting that they perceive the subject to have more than a purely academic use.

Positive attitudes towards the subject teacher were also rated as more important in Year 13 than in Year 12. This is most likely to be because of a lack of prior experience with the teacher at AS, as Psychology was a new subject for most, and many students will have been at a new college or sixth form. However, due to the way in which the factor was phrased, it is difficult to disentangle different factors affecting teaching, as participants were asked whether 'I like the teacher/the teacher is good' was an important factor, rather than the two statements being considered separately. Consequently, whilst some students might have been influenced because they liked the teacher, some may have been influenced by the quality of teaching and the potential positive effect that good teaching may have on their final A level grades. The latter would reflect the more pragmatic approach to decisionmaking and the emphasis on future attainment.

Furthermore. demographic factors affected participants' decision making. Participants from non-graduate parental backgrounds were significantly more likely to rate expected performance at A level as a 'very important' factor than participants with at least one graduate parent (χ 2=9.62, N=228, *p*=.022). Participants from areas of low deprivation were also significantly more likely to be influenced by Psychology being related to the subject they intended to study at university (χ 2=8.59, *N*=166, p=.015). As deprivation did not affect intentions to progress to university or participants' intended degree choices, it is unclear why this is the case. However, it may be that students from areas of low deprivation were more informed about A level subject choice and thus gave greater consideration to the requirements of university study.

Gender also affected the influence of some factors on participants' decisionmaking. Female students were significantly more likely to regard enjoyment of AS Psychology as a very important factor (χ 2=8.98, N=269, p=.03), as well as expected performance at A level (χ 2=15.49, N=271, p=.001). It is unclear what this means in practice, if female students are more motivated than male students by both enjoyment and performance. It may be the case that females were simply more likely to express strong opinions and thus rate these factors as 'very important' influences.

Sources of advice

An important aim of this study was to determine where prospective students seek advice from about A level Psychology. Consequently, participants were asked whether

they were given any advice about studying Psychology, and if so, which of a list of designated sources they had used. 60.4 per cent of respondents reported that they had been given advice. The proportion of respondents accessing each source is depicted in Table 6.

The most frequently used sources of advice were secondary school teachers, the internet, other students and friends, and parents. This indicates that, unsurprisingly, students are most likely to seek advice from the most easily accessible sources, primarily those that know them. However, the high proportion of respondents using the internet and attending open days suggests that when given the opportunity, students are keen to undertake independent research in order to find out information from new

Table 6: Sources of advice

Sources of advice	Number of students	%
Parents	248	32.3%
Brothers and/or sisters	112	14.6%
Secondary School Teachers	300	39.1%
Information leaflets produced by your secondary school	159	20.7%
Other students/friends	312	40.6%
University Admissions Tutors	39	5.1%
Speakers from HEIs	91	11.8%
Speakers from Employment	52	6.8%
Open Days/Careers Events	226	29.4%
Internet	254	33.1%
Guidance at sixth form after starting courses	221	28.8%
College interview	111	14.5%

sources. Very few students reported receiving advice about Psychology from speakers in Higher Education or employers.

Access to advice was strongly influenced by demographic factors. Students from graduate backgrounds (χ 2=6.37, N=367,p=.01) and male students (χ 2=7.82, *N*=429, *p*=.005) were more likely than their peers to have received advice from their parents. Participants from areas of low deprivation were also more likely to have sought advice from their siblings (χ 2=7.17, N=267, p=.007). Conversely, females were more likely to have spoken to friends or other students than male participants (χ 2=5.31, N=432, p=.02), whilst students whose parents did not have a university degree were more likely than others to have spoken to employers, although the number of students accessing this source was still very low (χ 2=4.15, N= 360, p=.04). Generally, those living in areas of high deprivation were the least likely to access every source of advice. This indicates that students whose parents have university degrees or live in areas of low deprivation are most likely to seek advice from family members, whilst students from more deprived areas are more likely to actively seek advice from independent sources.

Utility of advice

In order to determine how useful the advice participants received was, respondents who reported receiving advice about studying Psychology were asked how useful this advice was on a scale of 1–4, where 1 was 'very useful' and 4 was 'not at all useful'.

admissions Although and employers were considered to be the most useful sources of advice, it should be remembered that very few students accessed these sources. Of the more frequently utilised sources, secondary school teachers and guidance at sixth form were considered to be the most useful. Family and friends, whilst being common sources of advice, appear to have been of more limited use than teaching staff who either know the subject or are more acquainted with the A level system. Furthermore, whilst participants had received little direct advice from universities or HEIs, the independent research they had undertaken at open days and on the internet was generally regarded as useful in the decision to study Psychology.

Positivity of advice

We were also interested in whether the advice students received was positive about studying Psychology. This was due to con-

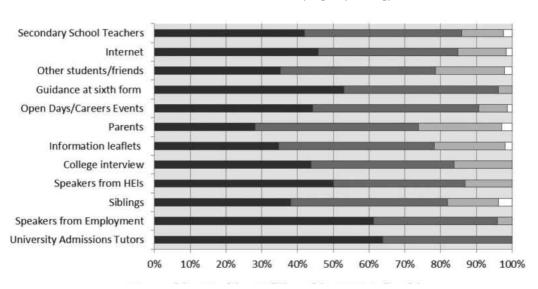


Figure 3: Utility of advice

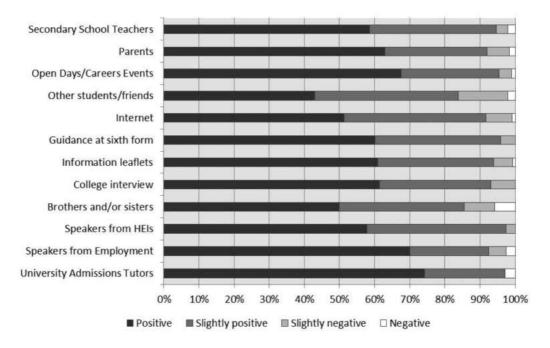


Figure 4: Positivity of advice

cerns that there are misconceptions about Psychology as a discipline, for example, the perception that it is a 'soft' subject. Consequently, students who reported receiving advice were asked to rate how positive this advice was on a scale of 1–4, where 1 was positive and 4 was negative.

Data indicates that the advice students received was broadly positive, but not overwhelmingly so. All sources were predominantly positive or slightly positive about Psychology, but few were considered to be 'positive' by more than 60 per cent of respondents.

Whilst few participants had spoken to employers or admissions tutors, they reported that these were the most enthusiastic groups. However, the sources students were most likely to access (teachers, the internet, parents and friends) varied in their positivity about Psychology. Parents and teachers – both at secondary school and college – were considered to give very positive advice. Conversely, only 51.4 per cent reported that information they had found on the internet was positive, and only 42.9 per cent found the same for

other students and friends. Whilst the nature of this data means that we do not know the overall impact the advice participants received had on their final decisions or which websites they accessed, it may be concerning that two of the most popular sources are also the most negative.

Information that participants would have liked to have received

Participants were also asked whether there was any information about studying Psychology that they would have found useful, but did not receive. 47.4 per cent of respondents stated that there was, which is perhaps to be expected given the relatively low proportion that reported receiving any advice at all.

Respondents were asked to select whether they would have liked more information about four categories: psychology-related careers, psychology-related degrees, the course content at A level, and assessment at A level. The data indicates that students would have liked to receive more information about

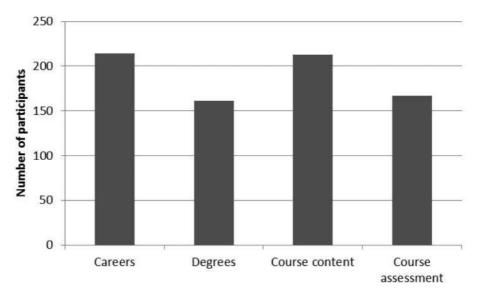


Figure 5: Information participants would have liked to have received

all four areas, in particular the subject content at A level and related careers.

Discussion and Conclusion

The findings of this study build a clearer picture of students' decision-making about Psychology at AS and A level. In particular, the data indicates that the factors affecting students' choices change between Year 12 and 13. Whilst the interest value of Psychology as a discipline is most influential at AS, by Year 13 students appear to be considerably more pragmatic in their decisionmaking, as they report being strongly influenced by both prior and expected attainment, possibly due to the importance of A level grades in admission to university courses. This suggests that the existence of AS level, particularly the summative assessment at the end of Year 12, affects the subjects that students choose to continue into Year 13.

This is corroborated by the fact that 13.6% of participants in Year 13 did not originally intend to continue Psychology after AS when they began the course. The nature of the data means that it is not possible to determine which specific factors resulted in students changing their mind, but likely causes are

greater enjoyment of the subject than expected, higher than anticipated attainment at AS, and worse than expected attainment in other AS level subjects. Consequently, for Psychology, a new subject for the majority of students, the AS level allows students to experience the discipline over the course of the year and gauge which grades they are likely to attain at A level through summative assessment at the end of Year 12. The AS level is also a relatively low risk option, as students still gain a qualification even if they choose not to continue in Year 13. It is not possible to comprehensively determine what the effect of the decoupling of AS and A level will be, especially given that many providers are still unsure about what provision they will offer once the reforms are completed. However, it is not unreasonable to suggest that students' decision-making with linear A levels will be more likely to mirror the pragmatic approach seen here at the end of Year 12, focusing on attainment, rather than the focus on subject interest and enjoyment seen at AS level. Consequently, it is likely that uptake of A level Psychology will decline.

Nevertheless, there are positive implications from this study. Contrary to our initial concerns, very few participants reported choosing it as a fourth or fifth A level or thought it was an inherently easy subject, whilst the majority perceived Psychology to have future relevance for both their career and degree. Additionally, it may be possible to counteract any negative effects of decoupling on uptake by ensuring that prospective students are appropriately informed about the benefits of studying A level Psychology. Participants in this study reported that they received relatively little advice about studying Psychology, and would have liked more. In particular, more information about Psychology-related careers degrees, as well as more information about the course content and assessment at A level before beginning the course would have been welcomed. Ensuring students are more knowledgeable about what the course involves and the benefits of taking Psychology may reduce the perceived risk of taking an entirely new subject for the full two year course.

Furthermore, the variation in the utility and positivity of various sources of advice, as well as the effects of demographic factors on access to advice, corroborates the idea that prospective students would benefit from easily accessible, impartial advice about Psychology. After secondary school teachers, students were most likely to speak to friends or peers, as well as conduct their own research on the internet: however, both of these sources were the most negative about Psychology A level. The British Psychological Society's (BPS) resources are a good starting point, but students would also benefit from being aware of the wider transferable skills A level Psychology offers and the applicability of these skills beyond a career or degree in Psychology itself.

Ensuring that students are aware of these benefits may require a concerted effort from university admissions tutors, academics and teachers to ensure that students are wellinformed. This could involve a greater dissemination of resources about Psychology to schools and A level providers. Additionally,

GCSE Psychology may be able to counter the removal of the AS level by giving students experience with the discipline at a less advanced level. Figures show that although uptake of the GCSE is very low, students who attain at least a C grade are highly likely to progress to Psychology at A level. Whilst GCSE Psychology is unlikely to become a mainstream subject due to its non-inclusion in headline accountability measures, such as the EBacc, the BPS could support schools to offer the qualification as an enrichment activity, by providing resources and support for non-specialist teachers. Finally, any impact on the uptake of A level Psychology will not be known until 2017, when the first A level exams in the first reformed qualifications will take place. It is also likely that entry patterns will not settle until examinations in all reformed qualifications have taken place, which will not be until 2019. Consequently, further research should monitor uptake of Psychology at AS and A level as reforms continue, to identify whether entry patterns are a concern.

Jessica Bowyer and Prerna Carroll,

Cambridge Assessment.
Contact:
munro.j@cambridgeassessment.org.uk
Jessica Bowyer
Cambridge Assessment
1 Regent Street
Cambridge
CB2 1GG

References

- Ashworth, J. & Evans, J. L. (2001). Modeling Student Subject Choice at Secondary and Tertiary Level: A Cross-Section Study. *The Journal of Economic Education*, 32(4), 311-320. doi: 10.1080/00220480109596111
- Association of Colleges. (2014). College Funding and Finance. from www.aoc.co.uk/sites/default/files/College%20Funding%20and%20Finance%201%20May%202 014%20FINAL_0_0.pdf
- Association of Colleges. (2015). Information for Schools and Colleges: Implementing A Level Reforms.
- Baird, J.-A., Rose, J. & McWhirter, A. (2012). So tell me what you want: a comparison of FE college and other post-16 students' aspirations. *Research* in Post-Compulsory Education, 17(3), 293-310. doi: 10.1080/13596748.2012.700095
- Bennett, J., Lubben, F. & Hampden-Thompson, G. (2011). Schools That Make a Difference to Post-Compulsory Uptake of Physical Science Subjects: Some comparative case studies in England. *International Journal of Science Education*, *35*(4), 663-689. doi: 10.1080/09500693.2011.641131
- Blenkinsop, S., McCrone, T., Wade, P. & Morris, M. (2006). How Do Young People Make Choices at 14 and 16? from http://dera.ioe.ac.uk/6449/1/RR773.pdf
- Dryler, H. (1998). Parental Role Models, Gender and Educational Choice. The British Journal of Sociology, 49(3), 375-398. doi: 10.2307/591389
- Francis, B., Hutchings, M., Archer, L. & Amelling, L. (2003). Subject Choice and Occupational Aspirations among Pupils at Girls' Schools. *Pedagogy*, *Culture & Society*, *11*(3), 425–442. doi: 10.1080/14681360300200182
- Garratt, L. (1985). Factors Affecting Subject Choice at A-Level. *Educational Studies*, 11(2), 127-132. doi: 10.1080/0305569850110204
- Gill, T. (2014). Uptake of GCE A level subjects 2013. Statistics Report Series No.72. Cambridge: Cambridge Assessment.

- Highton, J., Noble, J., Pope, S., Boal, N., Ginnis, S., Donaldson, R. & Greevy, H. (2012). Fit for Purpose? The view of the higher education sector, teachers and employers on the suitability of A levels. London: Ofqual.
- Joint Council of Qualifications. (2014). A, AS and AEA Results, Summer 2014.
- Sixth Form Colleges Association. (2015). SFCA funding impact survey report 2015. from http://www.sixthformcolleges.org/sites/default/files/110815%20SFCA%20Funding%20Impact%20Survey%20FINAL_0.pdf
- Stables, A. & Stables, S. (1995). Gender differences in students' approaches to A-level subject choices and perceptions of A-level subjects: a study of first-year A-level students in a tertiary college. *Educational Research*, 37(1), 39-51. doi: 10.1080/0013188950370104
- Sullivan, A., Zimdars, A. & Heath, A. (2010). The social structure of the 14–16 curriculum in England. International Studies in Sociology of Education, 20(1), 5–21. doi: 10.1080/09620211003655572
- Sutch, T. (2013). Progression from GCSE to AS and A level, 2010 Statistics Report Series No. 69. Cambridge: Cambridge Assessment.
- Sutch, T. & Zanini, N. (2015, Summer 2015). A Level reforms and subject choice. Higher Education Bulletin. from www.ocr.org.uk/Images/233241higher-education-bulletin-summer-2015.pdf
- Van De Werfhorst, H. G., Sullivan, A. & Cheung, S. Y. (2003). Social Class, Ability and Choice of Subject in Secondary and Tertiary Education in Britain. *British Educational Research Journal*, 29(1), 41-62. doi: 10.1080/0141192032000057366
- Vidal Rodeiro, C. (2007). A Level Subject Choice in England: Patterns of Uptake and Factors Affecting Subject Preferences. Cambridge: Cambridge Assessment.
- Wikeley, F. & Stables, A. (1999). Changes in school students' approaches to subject option choices: a study of pupils in the West of England in 1984 and 1996. *Educational Research*, 41(3), 287-299. doi: 10.1080/0013188990410304

Appendix A: Year 13 Questionnaire

A2 Psychology/ Sociology

Please only complete this questionnaire if you are in Year 13 and you study A2 Psychology.

Consent

This questionnaire is designed to gain information on how students choose A level subjects, with a specific focus on Psychology. This research will inform how subjects are promoted in schools and provide a greater understanding of the students studying these subjects. All data you provide will be confidential and anonymised. The data will be stored securely and used for research purposes only and will not be disseminated to third parties. If you would like to find out more about the research before you participate, please contact us at:

Psycho	ologya	ndSo	ocio	log	yRe	sea	irc	h@	ca	m	bri	dg	ea	sse	essi	me	nt.	or	g.u	k						
1.	Do y	ou g	ive	coı	nser	nt t	o p	oar	tici	pa	ate	in	th	is r	ese	ear	ch	?								
	Yes										Ν	lo	[
If you below		ans	wei	red	l 'No	o' t	0 1	the	e a	bc	ove	q	ue	sti	on	, p	lea	se	d	o n	not complete tl	ne q	ue	stic	nn	naire
Quest	ionna	ire																								
1. Ha	ive yo	u pre	evio	usl	y ta	ker	n a	GC	CSE	ir	n Ps	syc	chc	olog	gy?											
	Yes										Ν	lo	[
	If 'Ye	es'. F	lea	se i	tell i	us d	abo	out	th	er	n b	elo	วพ	:												
	,																									
	Subj																									
	Subj	ect:		••••		••••		••••			•••••		G	rad	e											
2. Ho	ow ma	any .	AS :	sub	jec	ts (dic	l y	ou	ta	ke	?														
Or	ne 🗆		T	wc				Th	re	е			Fo	ur				Fi	ve]					
Please rate tl				-				-						-				we	re	th	nese subjects to	э уо	u?	Ple	ase	е
																					Not at all Important		2	3	4	Very impor tant
AS subject																										
AS							1	- 1	1			1									<u>.</u> 1				_	
subject																									\Box	
AS subject]					
AS				1]				_	
subject	Ш								1_												J		ш			
AS subject																										

A2 Psychology/ Sociology

3. Please rate how important each of the following reasons was when you chose to study either Psychology at AS level.

	Psy	ycho	ology	y	
Not at all important	1	2	3	4	Very Important
I had studied the subject before and enjoyed it					
I thought I would do well in this subject					
I thought it would be an interesting/enjoyable subject					
I thought it would be an easy subject					
I thought this subject would be useful for my future career					
This subject is related to the university degree I want to study					
It was a new subject for me and it sounded exciting					
The school put pressure on me to choose this subject					
A teacher/tutor advised to take this subject					
My friends were taking this subject					
I like the teacher / the teacher is good					
This subject fitted well in my timetable					
I chose it as my fourth/fifth AS level subject					
I thought this was a good subject to have					
My parents advised me to take this subject					
 4. When you began the course, did you originally intend to carry Psychology Yes No 5. Please tell us about your A levels. How important are these sul Please rate their importance by ticking the appropriate bounds. 	oject	•			after AS level?
	 		Not	at all	I 1 2 3 4 Very
A level subject 2 A level subject 3 A level subject 3	_ _] _]				
A level subject 4	_ 				
A level subject 5					

A2 Psychology/ Sociology

6.	How important were each of the following reasons for your decision to continue Psychology
	after AS level?

Not at all important	1	2	3	4	Very Important
I enjoyed this subject at AS level					
I did well in this subject at AS level					
I thought I would do well in this subject at A level					
I thought it would be an easy subject					
I thought this subject would be useful for my future career]
This subject is related to the university degree I want to study]
I hold/hope to hold a university offer for which this subject is required					
The school put pressure on me to choose this subject]
I was advised to take this subject]
My friends were taking this subject					
I like the teacher / the teacher is good					
This subject fitted well in my timetable]
I chose it as my fourth/fifth A level subject I thought this was a good subject to have]
I thought I would enjoy this subject at A level]

7. Please rate the importance of the following reasons for choosing your combination of AS/A level subjects.

	Not at all important	1	2	3	4	Very important
It was the required combination for my future career						
It was the required combination for the degree I want to university	study at					
This combination fitted well in my timetable						
I was advised to choose this combination						
I wanted a mixture of science and arts/humanities subje	cts					
I wanted a mixture of new and traditional subjects						
I did not think about combinations (I only thought about individual subjects)	choosing					

A2 Psychology/ Sociology									
8. Were you given advice about choosing Page 1	sycholo	gy as a	an A l	evel su	ıbject î	? psy	cho	logy	
Yes □ No □									
If you selected 'No' please proceed to qu	uestion	12.							
9. If you were given advice, who gave you t Please tick all that apply	hat adv	ice and	d hov	v usefu	ıl was	it?			
	Yes	No		Not useful	1	2	3	4	Very usefu
Parents Brothers and/or sisters									
Teachers in your secondary school									
Information leaflets produced by your secondary school Other students / Friends									
University admission tutors									
Speakers from higher education institutions Speakers from employment									
Open Day / Career events									
Internet (e.g. university admission requirements) Guidance at this school/college after starting courses									
Interview at the college									
Did you use any other sources of advice whe details: 10. If you were given advice, how positive or						plea	se g	ive	
Danasta	Ne	gative	1	2 3	4	Posit	ive		
Parents Brothers and/or sisters									
Teachers in your secondary school	201								
Information leaflets produced by your secondary scho Other students / Friends	וסט								
University admission tutors									

Speakers from higher education institutions

A2 Psychology/ Sociology					
Speakers from employment Open Day / Career events Internet (e.g. university admission requirements) Interview at your college/sixth form Guidance at your college/sixth form after starting A levels					
11. If you were given advice, was it enough for you to make a well-informed decision about your choices of AS/ A level subjects?					
Yes □ No □					
12. Was there any information about Psychology that you would have liked but did not receive?					
Yes □ No □					
If Yes , which of the following would have found useful? Please tick all that apply.					
Information about Psychology related careers Information about Psychology related degrees Information about the subject's course content Information about how the subject is assessed					
13. Did you have to go to a particular sixth form/college in order to study Psychology? Yes \Box No \Box					
14. What do you intend to do when you finish your A levels?					
Start vocational training Get a job whether or not it offers training Go to college or institution of higher education Go to a university Be unemployed by choice Be unemployed and trying to get a job Get a job with training Have not made up my mind yet					
If other, please let us know in the space below:					

A2 Psychology/ Sociology				
15. If you are planning to apply to university, what subject do you intend to study?				
Psychology Psychology				
Sociology				
Other social science subject (e.g. Education, Health and Social Care)				
Biological sciences (e.g. Biology, Chemistry, Biomedicine)				
Business-related (e.g. Business Studies, Accounting, Economics)				
Humanities (e.g. English, History, Geography)				
Medicine Medicine-related (e.g. Nursing, Midwifery)				
Modern Foreign Languages				
Physical sciences (e.g. Physics, Engineering)				
Other				
I am not planning to apply to university				
16. If there is anything else that affected your AS/A-level choices, please tell us about it in				
the box below:				
Please tell us about yourself				
Please feel free to skip these questions if you do not feel comfortable answering. All				
information is kept confidential and anonymised.				
17. What is your date of birth?				
Day Month Year				
18. What gender are you?				
16. What gender are you:				
Male Female Other				
19. What is your home post code?				
20. What is the highest qualification your parents/ guardian have?				

A2 Psychology/ Sociology

Your father/ guardian		Yo	Your mother/ guardian	
	GCSEs/ O levels/ CSEs/ School Certificate		GCSEs/ O levels/ CSEs/ School Certificate	
	A levels/ AS levels/ Higher school certificate		A levels/ AS levels/ Higher school certificate	
	First university degree (e.g. BA BSc)		First university degree (e.g. BA BSc)	
	Higher university degree (e.g. MA, PhD, PGCE)		Higher university degree (e.g. MA, PhD, PGCE)	
	NVQ Level 1		NVQ Level 1	
	NVQ Level 2		NVQ Level 2	
	NVQ Level 3		NVQ Level 3	
	NVQ Level 4-5		NVQ Level 4-5	
	Other qualifications		Other qualifications	
	No qualifications		No qualifications	
	Do not know		Do not know	
for	ank you for taking the time to answer this questi the prize draw to win a £50 Amazon voucher, p low:		•	

The terms and conditions of the prize draw are as follows:

Prize draw is open to participants who submit the survey. All entries to be received by midday on 10th January 2015. Two winners will each receive a £50 Amazon Voucher. The prize may be changed at any time, no cash alternative, prize is subject to availability. Vouchers are valid for one year. Entries received after the closing date will not be included in the draw. Entry to the prize draw is free. The winner will be chosen at random. No correspondence will be entered into. The name of the winner will be made available for up to 28 days after the closing date to anyone sending an email to Psychology and SociologyResearch@cambridgeassessment.org.uk