Exploring the relationship between on-campus outreach and HE entry

The HEAT Research Group, on behalf of HEAT members, commissioned the Behavioural Insights Team (BIT)* to investigate the impact of on-campus outreach activities on progression to Higher Education. At the point of commissioning HEAT’s quantitative data and member qualitative findings seemed to suggest that there might be a correlation between attending a campus visit and the propensity of the most disadvantaged students to enrol in Higher Education (HE). *https://www.bi.team

Methodology
BIT worked with a HEAT dataset containing 110,526 outreach participants who took part in 155,565 participant interactions between 2004 and 2016. Members were given the opportunity to check the activities that they designated as taking place ‘on-campus’. BIT used descriptive statistics to explore the correlation between disadvantage, engagement in outreach activity and HE entry:

Disadvantage
BIT were asked to use the ‘HEAT Groups’ classification methodology to define ‘disadvantage’ in the data. This classification system uses a basket of measures, both socio-economic and attainment based, to group outreach participants by level of disadvantage. (For a full HEAT Groups methodology please contact the HEAT service. Members can download a copy from the HEAT File Store).

<table>
<thead>
<tr>
<th>Disadvantage</th>
<th>High</th>
<th>Low</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td>Group 1</td>
<td>Group 3</td>
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<tr>
<td>Medium</td>
<td>Group 2b</td>
<td>Group 4b</td>
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<tr>
<td>Highest</td>
<td>Group 2a</td>
<td>Group 4a</td>
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Engagement
Students classified by the HEAT Group methodology may have quite different levels or patterns of engagement in outreach. BIT therefore controlled for the level of intensity of outreach activities that students engaged in. They used a HEAT methodology which weights activities by participants-to-staff ratio, multiplies these weights by the number of contact hours with participants on that activity, and then calculates an intensity score for each student (the sum of all weights x contact-hour products of all activities a student attended). These intensity scores (grouped by quintile) were then controlled for in the analysis.

Findings
- Outreach participants who attend on-campus activities are more likely to enter HE than those attending off-campus activities - this effect is particularly pronounced among disadvantaged groups.
- This relationship is exceptional to on-campus visits - other types of activity do not show this pronounced increase in HE entry for disadvantaged groups. HEAT’s in-house research found that the effect of ‘campus visits’ in most pronounced when included as part of a package of other activities. Students who had done a similarly intensive package of activities, but without a campus visit, did not progress to HE at such a high rate.
- The association between HE entry and on-campus visits is strongest for those outreach participants who are socio-economically disadvantaged but have high attainment at KS4.
Across the total cohort/all HEAT Groups, 55% of students who attended at least one on-campus activity enrolled in HE, while only 50 percent of students who did not attend an on-campus activity went on to enrol.

For students from non-disadvantaged backgrounds, there is no significant difference in HE enrolment between those who did and did not attend at least one on-campus activity. For HEAT Group 3 (Low disadvantage/Low attainment), for instance, the difference between those attending and those not attending an on-campus event is about 34 - 30 = 4 percentage points. Since the confidence intervals overlap, however, it is plausible that this difference is the result of the particular sample of students in our data, and not a feature of the underlying population as a whole.

The confidence intervals do not overlap for those from disadvantaged backgrounds though, meaning that outreach participants from disadvantaged backgrounds who attended at least one on-campus activity are more likely to attend HE no matter their level of prior attainment at KS4. Note that this difference is largest for those socio-economically disadvantaged outreach participants with highest attainment. The proportion of HEAT Group 2a - High disadvantage and highest attainment - who enter HE is 10 percentage points higher among those who attended one or more on-campus activities, even when intensity of the total package of activities they attended is controlled for.