National Collaborative
Outreach Programme
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PATHWAYS

National Collaborative Outreach Programme (Phase 1)

Monitoring and Evaluation Report September 2019

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Executive Summary

University of Northampton's Institute for Social Innovation and Impact (ISII) undertook an evaluation of the National Collaborative Outreach Programme (NCP) for Leicestershire, Northamptonshire, and Rutland areas. NCOP brought together 29 partnerships of universities, colleges and local partners to deliver outreach programs to young people in years 9 to 13 who live in areas where higher education participation was lower than might be expected given the GCSE results of the young people that live in the area. Phase one of NCOP began in January 2017 and ran until July 2019 (OfS, 2019). Office for Students (OfS) summarised the aims of Phase One as to support the government's social mobility goals by increasing the number of young people from underrepresented groups who go to higher education (HE).

This report aims to examine the impact of Pathways' interventions (decided previously by THE Consortium) that young people took part in. Pathways is the collaboration of Higher Education providers in Leicester City, Leicestershire, Northamptonshire and Rutland who prepared and ran a programme of activities and events developed to suit to the specific needs of young people and their families.

For ISII's evaluation and monitoring report, thirteen individual activities (which are explained in detail in Section 4) ran by Pathways team evaluated by ISII. The ISII team utilised both quantitative and qualitative methods to gather data from students, and teachers. Quantitative data was collected through HEAT and East Midlands Widening Participation Research and Evaluation Partnership (EMWPREP) databases to monitor participation in Pathways activities and through quantitative surveys individually tailored for each spotlight activity. Qualitative data was gathered from different research tools such as interviews, focus groups, qualitative surveys (both for students and school staff), storyboards, students' writings, and observations.

Summary of Findings

As mentioned above, the ISII team gathered data from thirteen different activities. The findings from these activities and their analyses are presented individually in Section 5 of this report. The research identified three key categories, extracted from the overall data gathered from the students that took part in the NCOP activities, these are as follows: 1) *family engagement*, 2) *students' knowledge about HE*, and 3) *increasing students' confidence*.

1. The surveys collected from students that attended activities such as Girls into STEM, Women into STEAM, and Big Bang Northants, indicated that the students' families have a big influence on their future decisions and educational choices. Both the teachers and the students who participated in our research noted the importance of families' perception towards HE. Some teachers felt that their students needed parental role models who had the experience of going to university so that their students could be supported by their parents. The students also reported in the surveys that their mothers and fathers had an influence on their decisions to go to university or study STE(A)M subjects (survey results are available in section 5).

2. Our research showed that one of the issues identified by students regarding HE is that they lack information about how to apply for university, accommodation, and which subjects are available to them. The data indicated that the students that took part in activities such as the Residentials, Car Crash Careers Day, and YSA GO Camp (which were university-based and the

students experienced being in a university first-hand) learned about university life and how to apply for university. The students who attended these activities reported that their awareness increased about university life, and they felt more encouraged to apply for a university.

3. Events such as Commando Joe's and English and Maths Mentoring, where there is an activity leader or a mentor that directly engages with the students for a period, seemed to increase students' behaviour and confidence. This suggests that having a strong role model in students' lives made a positive change. For instance, the students attended Commando Joe's stated that the activity helped with their communication skills and confidence.

Recommendations

Based on the findings outlined above, the following recommendations are made for Phase Two of NCOP.

More family engagement:

Data suggest that parents have a direct influence on the students' choice. One of the aims of NCOP Phase One was to ensure that the key influencers, which the evidence suggests are parents and teachers, receive communication and information on HE and Pathways engage with them. Therefore, moving forward, it is crucial to have more engagement with family members of the NCOP students.

More local university engagement:

Data collected from multiple-day activities such as *Residentials* indicated that the students attending the events that are on campus, learnt about how university life could be, which aligns with NCOP's aims to increase awareness in HE. However, the students still had questions about how to apply for university, bursaries, and did not receive enough information on accommodation (some students especially had concerns about living away from home). If local universities engage more with students who are living locally, these students could learn more about their facilities, different subject options, how to apply for university and accommodation choices – such knowledge may help allay their concerns about living away from home.

Importance of having a role model:

Another significant finding from the data was how having a positive role model made a positive impact on students' lives and encouraged them about their future. Having a role model increased their self-confidence and helps them think about their future. Therefore, activities, where students engage with positive role models (who could be mentors, activity leaders, or other students who are older than them), could improve students' self-esteem, develop social skills and help students perform better at school.

1. What is NCOP?

The National Collaborative Outreach Programme (NCOP) brings together 29 partnerships of universities, colleges and local partners to deliver outreach programs to young people in years 9 to 13 who live in areas where higher education participation is lower than might be expected given the GCSE results of the young people that live in the area.

Phase one of NCOP began in January 2017 and aimed to support the government's goals to double the proportion of young people from underrepresented backgrounds in Higher Education (HE) by 2020; increase by 20 per cent the number of students in HE from BAME groups and address the under-representation of young men in HE. Phase two of NCOP started in August 2019 and will build on phase one while supporting two main strands of activity:

> ➢ Targeted higher education outreach within the local areas where NCOP can have the most impact
> ➢ Outreach hubs within the 29 local partnerships (known as 'consortia' in NCOP phase one) with cross-England coverage to help schools and colleges access the higher education outreach they need and provide a platform for wider collaboration.

(Source*: Office for Students, 2019)*

2. Who are we?

Pathways is the collaboration of Higher Education providers in Leicestershire and Northamptonshire who have identified a programme of activities and events developed suit to the specific needs of young people and their families in Leicester city, Leicestershire, Northamptonshire, and Rutland. Through these, they aim to provide the student's tools to enable them to raise their attainment, increase their transferable skills and gain knowledge of Higher Education opportunities. Pathways works within 26 urban area wards, identified by the Office for Students (OfS), in Northamptonshire, Leicestershire and Rutland which correlate to the priority areas for the counties work in relation to chaotic families, crime, social housing policy, health and wellbeing. Pathways works with schools and colleges within these wards across a range of different interventions, allowing students who take part in the events to experience life at university, develop new skills, explore future careers and more.

The Institute for Social Innovation and Impact (ISII) at University of Northampton is responsible for monitoring and evaluating the work that Pathways carries out, whilst the East Midlands Widening Participation Research and Evaluation Partnership (EMWPREP) is responsible for monitoring and tracking Pathways activities and participants and providing quantitative data.

The figure below indicates the number of NCOP students engaged with who consented to be tracked as part of the programme from August 2018 in the Leicestershire and Northamptonshire areas.

Figure 1: Number of tracked NCOP students by area.

NCOP	NCOP Ward	Unique Participants	2+ Activities	5 Hours+	10 Hours+
Pathways	Abbey (00FNNF)	72	58	51	28
	Avondale (34UEGA)	197	193	102	81
	Central (34UBFN)	285	273	229	164
	Delapre (34UFGC)	273	244	221	138
	Drayton (34UCGQ)	212	209	159	115
	East (34UBFQ)	165	155	134	90
	Eyres Monsell (00FNNQ)	47	31	36	28
	Freemen (00FNNS)	35	30	29	23
	Greenhill (31UHGH)	17	13	12	7
	Hazelwood (34UBFR)	286	273	220	133
	Hill (34UCGS)	258	251	187	119
	Kingswood (34UBFT)	337	319	250	153
	Loughborough Ashby (31UCGN)	6		SUPPRESSED	
	Melton Egerton (31UGGC)	17	16	16	SUPPRESSED
	New Parks (00FNNX)	46	39	28	19
	Oakham North West (00FPND)	SUPPRESSED			
	Queensway (34UHGB)	106	86	73	43
	Rushden West (34UDGP)	253	240	218	105
	Shire Lodge (34UBGA)	277	246	207	128
	South Wigston (31UJFR)	26	20	25	20
	Spencer (34UFGT)	321	302	260	188
	St Andrew's (34UEGL)	224	219	131	104
	St James (34UFGS)	252	235	216	155
	Thorplands (34UFGU)	233	205	168	57
	Warkton (34UEGW)	209	204	138	122
Pathways Total		**4,155**	**3,861**	**3,112**	**2,024**

3. Activities

A range of activities are provided by Pathways team throughout the year.

Figure 2: Example activities

Commando Joe's
The Big Bang Northants
Girls into STEM at Leicester College
Pathways 1851 High SEAS Experience
English and Maths Mentoring
Pet-Xi Training
Year 10 Holiday Club
Car Crash Careers Day

The aims of the activities for Phase One are:

- To increase the application to HE rates of learners from identified schools in target wards by 2020.
- To increase the proportion of learners in target schools with sufficient attainment at KS4 to successfully progress onto KS5 level study.
- To increase the number of female learners opting to study a STEM subject at HE, by delivering activities aimed at raising their awareness of opportunities available in science, technology, maths and industry.
- To ensure that the key influencers (i.e. parents, carers, and teachers) receive communications around all activities offered by Pathways and wider information about options into Higher Education.

The role of the ISII team is to evaluate thirteen, previously agreed, spotlight activities[1] which are:

1) English and Maths Mentoring
2) Women into STEAM
3) Pet-Xi
4) VIP Easter Stress Release
5) Year 12 Residential (Leicestershire)
6) VIP University Residential (Northamptonshire)
7) Pathways 1851 High SEAS Experience
8) Year 10 Holiday Club

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[1] English and Maths mentoring was also one of the spotlight activities however this report only covers the data gathered from Leicestershire since the programme was ended in Northamptonshire.

9) Car Crash Careers Day
10) Commando Joe's
11) YSA Go Camp
12) Girls into STEM
13) The Big Bang Northants 2019

These activities run at different times throughout the academic year. For this report, the ISII team collected and analysed data from the activities that ran between January and July 2019, which are:

- Commando Joe's (Northamptonshire)
- Big Bang Northants (Northamptonshire)
- Girls into STEM (Leicestershire)
- Pet-Xi (Northamptonshire)
- Pathways 1851 High SEAS Experience (Leicestershire and Northamptonshire)
- Car Crash Careers Day (Northamptonshire)
- VIP Easter Stress Release (Northamptonshire)
- YSA Go Camp (Leicestershire)
- Year 12 Residential (Leicestershire)
- Year 10 Holiday Club (Leicestershire)
- VIP University Residential (Northamptonshire)
- English and Maths Mentoring (Leicestershire)

4. Evidence Based Research

To monitor and evaluate the work of Pathways a range of data collection tools have been used to help build a robust evidence base. Evaluation and monitoring are based on both quantitative and qualitative research methods used to gather data from the spotlight activities. Quantitative data was collected through a database to monitor participation in Pathways activities and through quantitative surveys individually tailored for each spotlight activity. Qualitative data was gathered from different research tools such as interviews, focus groups, qualitative surveys, storyboards, students' writings, and observations. The first three sections of the report will present the data analysis from the spotlight activities that were focused on STEM/STEAM: The Big Bang Northants, Girls in STEM, and the 1851 High SEAS Experience. Then the report continues to present data from the rest of the activities, which have a range of different learning aims for the participants such as: developing self-efficacy (e.g., Commando Joe's, VIP Easter Stress Release), introducing different career choices (e.g., Car Crash Careers Day), and raising aspirations (e.g., Residentials, Year 10 Holiday Club).

All the findings were anonymised and the participants were given codes. The Table 1 below explains these codes:

Table 1: The codes

The Big Bang Northants Teacher (TBBNT)
Girls into STEM Student (GISS)
Commando Joe's Student (CCJS)
1851 Sailing Event Student (1851S)
Year 10 Holiday Club Student (HCS)
English and Maths Mentoring Student (EMS)
Year 12 Residential Leicestershire Student (RS)
VIP University Residential Northamptonshire Student (VIPS)

| Car Crash Careers Day Student |
| Car Crash Careers Day Teacher |
| PET-Xi Student (PETS) |

5. Findings

The Big Bang Northants

The Big Bang Northants (TBBN) was a STEAM event in conjunction with 'Learn by Design'. As well as STEAM practitioners, local logistics business partners of the University of Northampton were actively presenting at the event. The purpose of this event was to increase the interest of the students (across Key Stages 3-5) in the STEAM subjects and careers. This year's event took place on the 27th of February at Silverstone. 51 schools and 2400 students in total attended the event. A mixed-methods approach was used to identify the impact of the event on the teachers and learn their perspectives on the Big Bang. An online survey was designed and opened from the day of the event to the end of March for teachers to complete. 28 teachers completed the survey on the day.

Moreover, on the day of the event, the ISII team ran an activity called "Octopus" where the students were asked to answer 8 questions about careers in STEAM. This activity was designed to understand students' views on different STEAM subjects and HE. The students' answers provided qualitative data showing their views on STEAM.

Students

The Octopus included eight questions directed to students who came to visit ISII's stall. These eight questions were:

- What is research?
- What do researchers do?
- Who can become a researcher?
- Which is your favourite STEAM (Science, Technology, Engineering, Arts, Maths) subject?
- Do you want a career in STEAM (Why/Why not)?
- Do you consider attending a university after finishing school?
- Do you think it is important to attend university?
- What would stop you from attending a university?

The students picked any question they wanted to answer and write their answers on post-it notes. Therefore, not all questions have the exact same response rate. The students were encouraged to answer as many questions as possible however, some questions were more popular than the others. After the event, the ISII team analysed the responses and there were interesting comments regarding STEAM subjects and life after school.

Most of the students (36 out of 48) believed that anyone could become a researcher and they did not see any barriers to becoming one. Some of them noted that they need to work hard to become one. When we asked them "what is research" most of them stated that it was "finding out things". Most of the students (25 out of 35) noted that they would like to have a career in STEAM. Some of the stated that it was because "science is fascinating" or because "we do not have enough scientists". Not many students wrote the reason why they wanted to have a career in STEAM but it is important to know that the majority of the students were interested in having a career in STEAM. Arts was the most popular choice when the students responded to which STEAM subject they liked the most.

Please see Table 2 below:

Table 2: Which is your favourite STEAM (Science, Technology, Engineering, Arts, Maths) subject?

Subjects	Number of Students
Science	19
Technology	19
Engineering	7
Arts	50
Maths	27

When we look at the questions regarding attending university, 57 students wrote "yes" whether they consider attending university or not. 11 of them were not sure so they wrote "maybe" or "I do not know" and 7 of them wrote "no".

Question number 7: "do you think it is important to attend a university? "turned out to be the most responded question. 116 students in total responded and 100 out of 116 students wrote "yes". There were only 9 students who said no. The rest stated that they were not sure and it depended "on the job" or "who they are".

The last question aimed to understand why students may see attending university as a challenge. There were a variety of responses to this question. Most of the students wrote down similar things which were family, finances and grades. However, there were some students who wrote bullying. This is a significant issue and it implies that some of the students might be getting bullied in school and are worried that it would be the same if they attend university.

Teachers

Surveys (Appendix A) created by the ISII team were sent to the schools that attended the Big Bang event on 27th of February 2019. The research team was also present on the day to do the survey with some of the teachers on iPads. Therefore, the survey was available for the teachers during the event and after the event and closed on the 30th of March 2019.

The survey included twelve questions focusing directly on teachers' experience at the Big Bang event. 28 individuals returned the surveys on the day. From these 28 teachers, 13 were secondary school and 15 were primary school teachers[2]. This report summarises these 28 participants' responses from the survey. Firstly, Figure 3 below illustrates the breakdown of the impact that the teachers hoped to have on their students by bringing them to TBBN.

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[2] Primary schools access to events and activities were funded through the universities Access agreement, not through the NCOP provision.
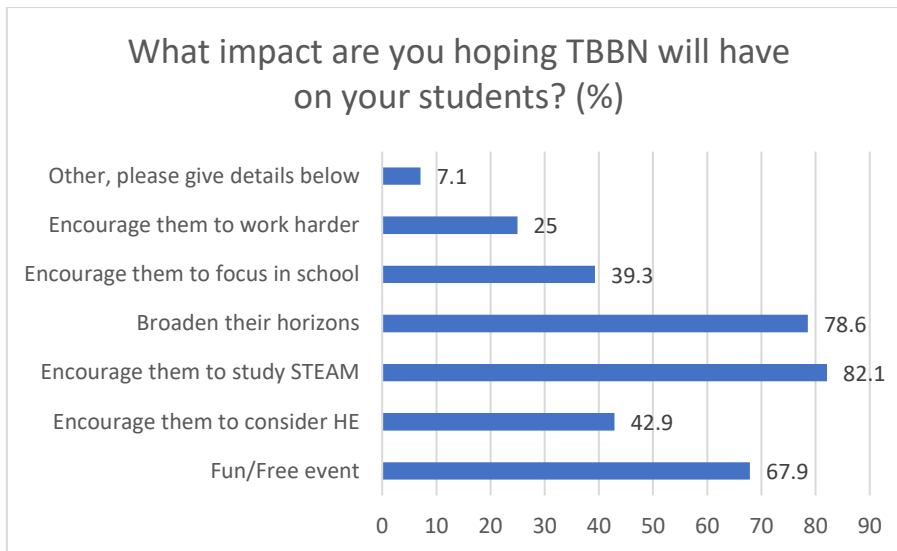
Figure 3: What impact are you hoping TBBN will have on your students? (please tick all that apply)

According to this chart, 82.1% of the participants stated that the reason why they brought their students to the Big Bang was to encourage them to study STEAM subjects. However, Higher Education did not seem to be their main motivation (42.9%). Moreover, 67.9% of the participants suggested that they brought their students to TBBN since it was a fun and/or free event. One of the teachers noted that they bring their students to these events so that they can *"introduce careers to them they'd never thought of before. Improve their independence and personal skills as they moved through the exhibition"* (TBBNT4). Another stated that the teachers want to *"encourage them (the students) to see that their school work matters and takes them somewhere towards making the world a better place"* (TBBNT5). 57.1% of the teachers were neutral when it comes to whether girls are keener on STEM subjects or not. Only 3.6 % agreed that girls were more interested in STEM subjects compared to boys. However, when the same question asked in terms of boys being more interested in STEM subjects, 46.4% of the teachers agreed that boys are keener on STEM subjects. Figure 4 and Figure 5 below indicate the teachers' views on this.
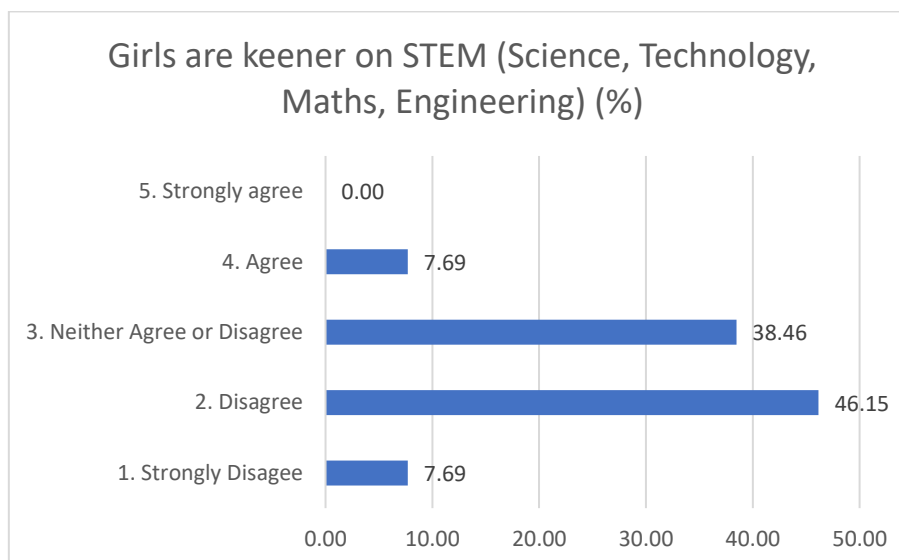

Figure 4: Girls are keener on STEM (Science, Technology, Maths, and Engineering)
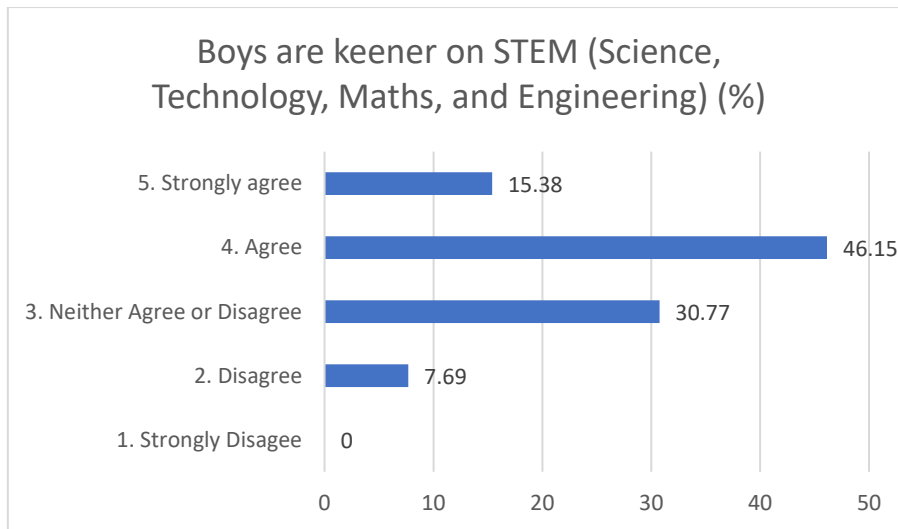
Figure 5: Boys are keener on STEM (Science, Technology, Maths, and Engineering)

Secondary school teachers strongly agreed (15.38%) that boys were keener on STEM. However, when looking at this result regarding girls' interest in STEM, a small number of the secondary school teachers strongly disagreed (7.69 %) that girls were keener on STEM.

When we asked the same question but this time emphasising STEAM instead of STEM subjects, 46.15% of the teachers agreed that the girls are more interested in STEAM subjects whereas when it was STEM only 7.69% agreed and none of the participants strongly agreed or strongly disagreed that the girls were keener on STEM subjects.
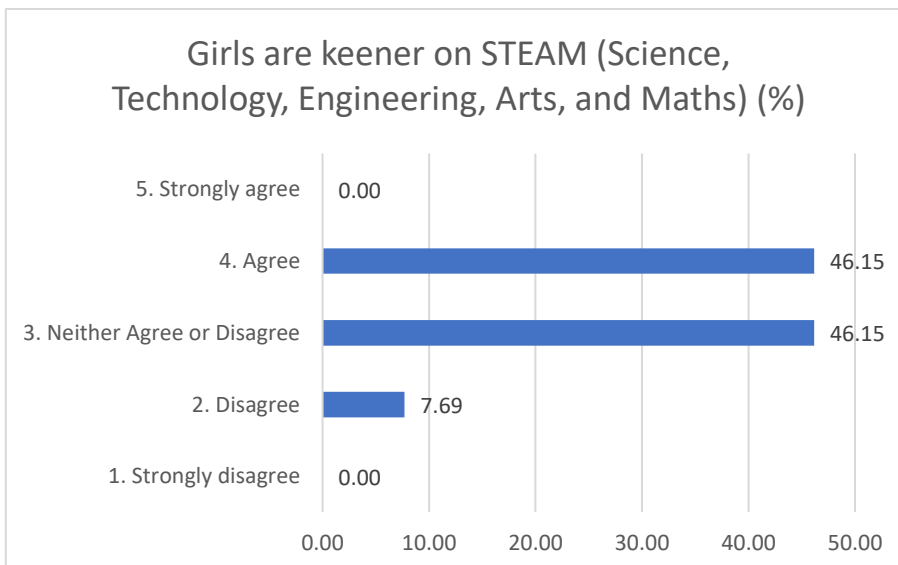

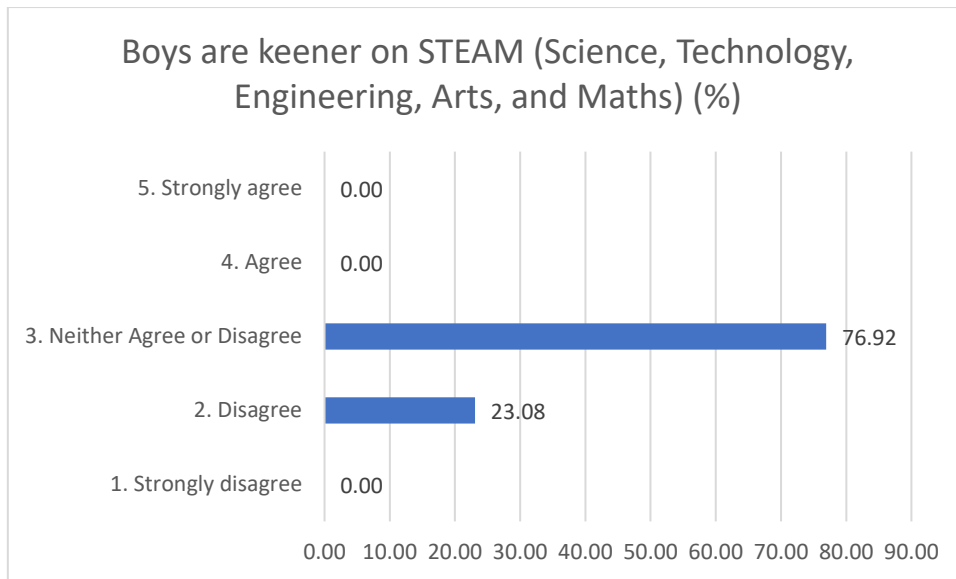*Figure 6: Girls are keener on STEAM (Science, Technology, Engineering, Arts & Maths)*
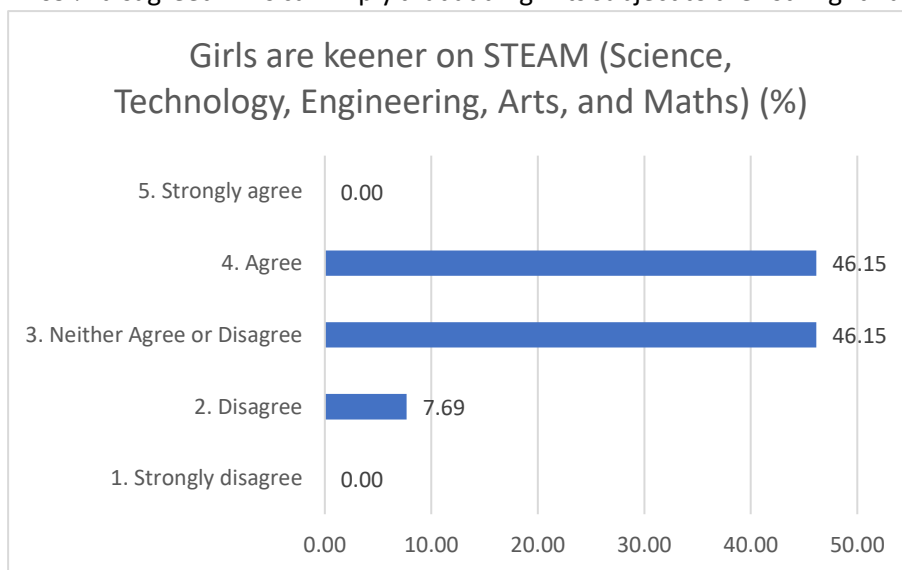
Figure 7: Boys are keener on STEAM (Science, Technology, Engineering, Arts & Maths)

Moreover, 23.08% of the teachers disagreed that boys are keener on STEAM whereas when it was STEM 7.69 % disagreed. This can imply that adding Arts subject to the list might have made a difference

(see:

Figure 6 and Figure 7). 46% of the secondary school teachers thought girls were keener on STEAM. This could again imply that adding Arts subject to the list seemed to make a difference to the secondary school teachers' views.

However, it is important to point out that when the teachers were asked whether gender is an issue or not, 39.3 % stated that it was not and the reasons why students may or may not be interested in STEM or STEAM subjects varied. Only, 7.1% strongly believed that gender was an issue when it comes to choosing STEM or STEAM subjects. Please see Figure 8 below:
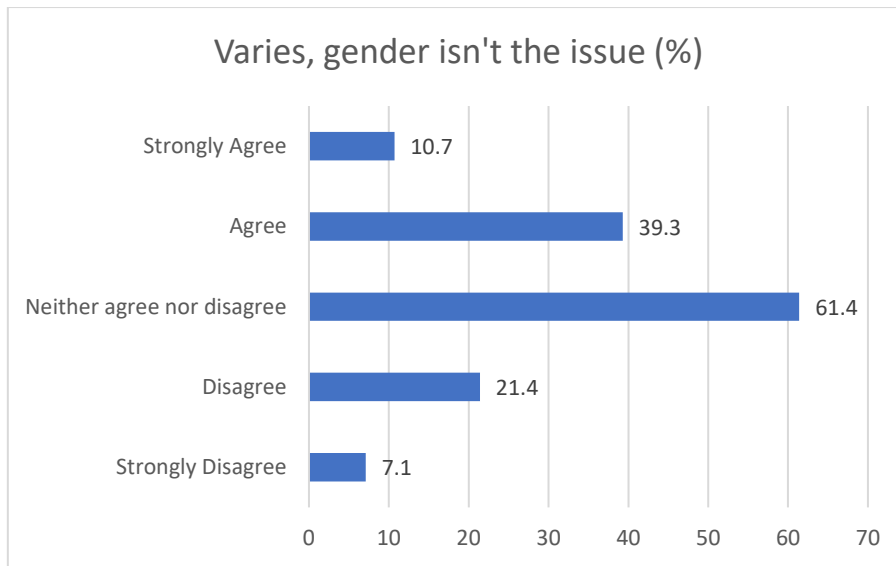
Figure 8: Varies, gender isn't the issue

There were some secondary school teachers (16.0 %) who disagreed that the gender was not an issue. The teachers were also asked to indicate whether events like the Big Bang can make any difference to close the gap among students in terms of socioeconomic strata. 64.3 % of the participants reported that they believed events like this help to close the gap in Higher Education (Figure 9).
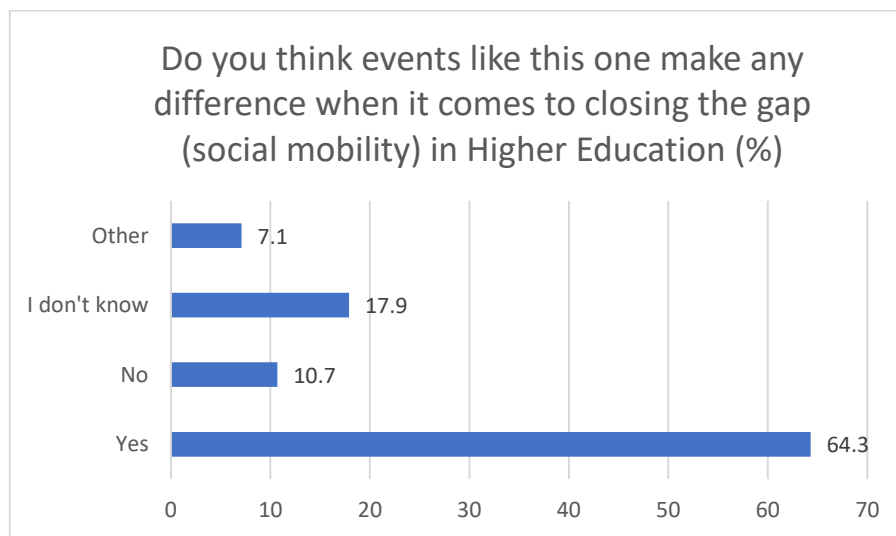

Figure 9: Do you think events like this one make any difference when it comes to closing the gap (social mobility) in Higher Education?

One of the participants also said:

> *"I think it allows children, who perhaps have no experience of what higher education means, to have a wider view of what is available to them" (TBBNT6). Another participant stated that the event influenced their students:" It inspired my students who were not curious about STEM to now be" (TBBNT7).*

The teachers were asked if they thought TBBN could have more of an impact on some students than others due to differences in age, gender, ethnicity, socio-economic situation. One of the teachers addressed the issue of age and suggested that these events have more impact on younger students:

I think it has a bigger impact on pupils younger than Year 11 for a couple of reasons. Younger years are usually still flexible about career choices and are often in need of more information. Year 11 have so much to focus on in year 10 and are often more consumed with the direct next step (college course, A Level subjects). There's often less of a chance to take Year 11 on this trip as it falls in the part of the year where all of a sudden, they feel the importance of knuckling down, when it's close to their real exams (TBBNT8).

Most of the teachers stated that the event raises awareness for their students, and show them that there are many career opportunities they can consider. For instance, one teacher said: *"it enhances curiosity in all children and widens girls' eyes to what is open to them in terms of careers in STEAM subjects"* (TBBNT10).

The teachers also commented on the barriers that students come across when it comes to Higher Education. A common view among the participants that the students' families have a big influence. Some felt that their students need parental role models who had the experience of going to university so that their students could be supported by their parents. One said: *"I think children don't understand what is out there and available for them if their parents haven't been through HE"* (TBBNT11). Another stated that the barrier is: *"lack of parental role models - many are first-generation university students"* (TBBNT12). This highlights how crucial it is to engage with parents, as well as students, to raise awareness about HE. Some participants also emphasised the fact that there are financial constraints that stop students attending HE institutions. As one of the teachers said:

Financial support. I do not make sense for pupils with disadvantaged backgrounds to chase after something that isn't affordable and would lead them into debt. These pupils are often more aware of money and how it can control their opportunities. There needs to be more widely accessible grants (TBBNT13).

The last couple of questions addressed teachers' general perception of TBBN. The majority of the teachers had positive feedback and they felt that the event benefited their students and helped them to think more about different STEAM careers. As one teacher put it: "It shows the children what options there are for them in further education and a career path" (TBBNT14). Another said that it was great for students to: *"being able to talk to real scientists and try things you haven't seen at primary school because the facilities are not available"* (TBBNT17).

When the teachers were asked whether they would come to TBBN again or not, only 3 out of 28 participants said they would not. The biggest issue for the teachers was the busyness and crowdedness of the event; some of the teachers were not happy with the fact that primary students' visits were at the same time as the secondary school students' visits. It was apparent from the participants' suggestions that the biggest concern was the space issue. It was suggested by the teachers that the event could be spread over two days. As one teacher put it:

One day for the primary and one day for the secondary pupils and cater the STEAM events for the age group. My primary children are scared of teenagers and this event is daunting when you are 10 no matter how much you are into the subject when you are being pushed about and separated from your friends (TBBNT15).

This view was echoed by another teacher: *"organisation of the movement of children at the venue. Primaries were quite intimidated by the scale of the secondary cohorts. Possibly run it over 2 days* (TBBNT16). The space issue could be taken into consideration for next year's event.

Another STEM activity that took place in Leicester, and focused on female students.

Girls into STEM

The "Girls into STEM" day was part of a wider Industry Day that Leicester College ran on 27 March 2019, which covered careers in STEM, the creative industries (stage makeup, dance, graphic design etc.) and uniformed services. In total there were 239 pupils at the Industry Day. There were 90 valid EMWPREP forms. 28 were from a Widening Participation[3] (WP) postcode with an additional 10 from an NCOP postcode.

The event was for girls in year 9 and 10 studying at any school in Leicester/Leicestershire who were considering or interested in further education and/or careers in Science, Technology, Engineering and Maths. According to the Leicester College's website, the event was aimed at students who were "predicted to achieve a grade 9-4 in English, Maths and Science plus two other subjects" (Leicester College, 2019). This meant that the students who were engaged with the activity were already interested in Maths and Science and were considered by their schools to be high achievers.

The research team spent the day at Leicester College to observe the STEM activities and gather feedback from the students, they attended some of the workshops, such as Motor Vehicle, Engineering, Computing and Science. Data was collected through a mixed-methods survey (Appendix H) Completed on iPads,32 students completed the survey. The first section provides information on the students' views on different STEM subjects followed by summaries of the students' feedback on the overall event.

Feedback on the STEM subjects

The survey asked the students questions about their interest (or disinterest) in STEM and STEM-related subjects. When students were asked why they would consider studying a STEM subject, 68.8 % stated that STEM provides "good career opportunities" (Figure 10). 15.6% believed that STEM subjects are intellectually challenging and that would be their reason to study STEM subjects. 9.4% reported that the reason why they would consider a STEM subject would be "to make a positive difference in society". Therefore, we can conclude that when it comes to choosing a field of study, students are more likely to incline for a subject that would provide them with a good career opportunity.
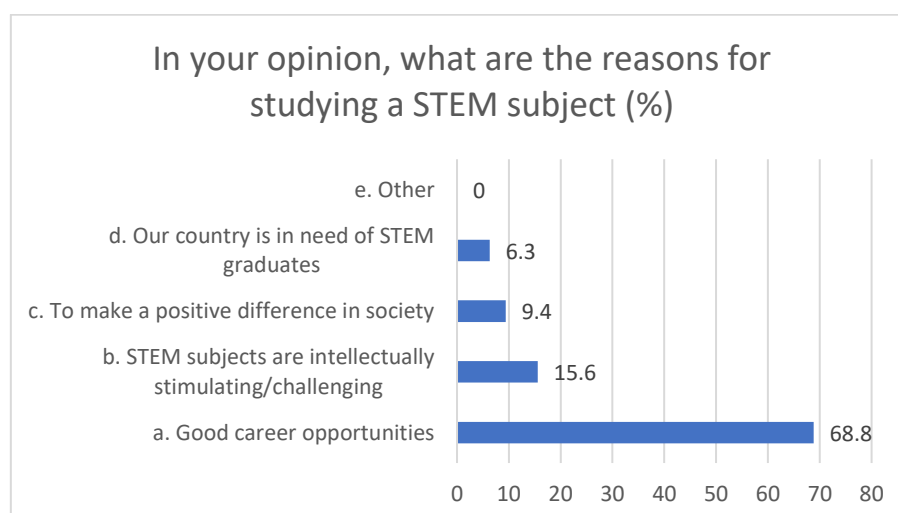

Figure 10: In your opinion, what are the reasons for studying a STEM subject

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[3] Like NCOP, WP aims raise aspirations, increase attainment, and break down the barriers about HE some young people that may face.

Some survey questions were designed to see if the students had any influences from family members, teachers or friends regarding their decision to have a STEM career in future. When the students were asked if anyone, has influenced your desire to pursue a career in STEM there were mixed responses. However, 46.9% of the students stated that their mother had "lots of influence" (Figure 11) and, 29% said their father had "lots of influence" (Figure 12).
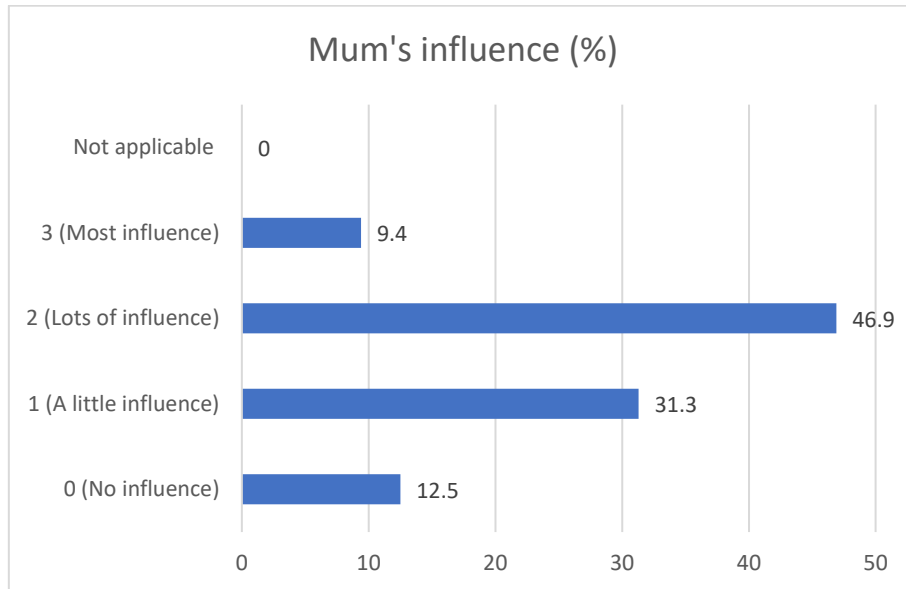
Mum's influence (%)

Category	Value
Not applicable	0
3 (Most influence)	9.4
2 (Lots of influence)	46.9
1 (A little influence)	31.3
0 (No influence)	12.5

Figure 11: Mum's influence

Dad's influence

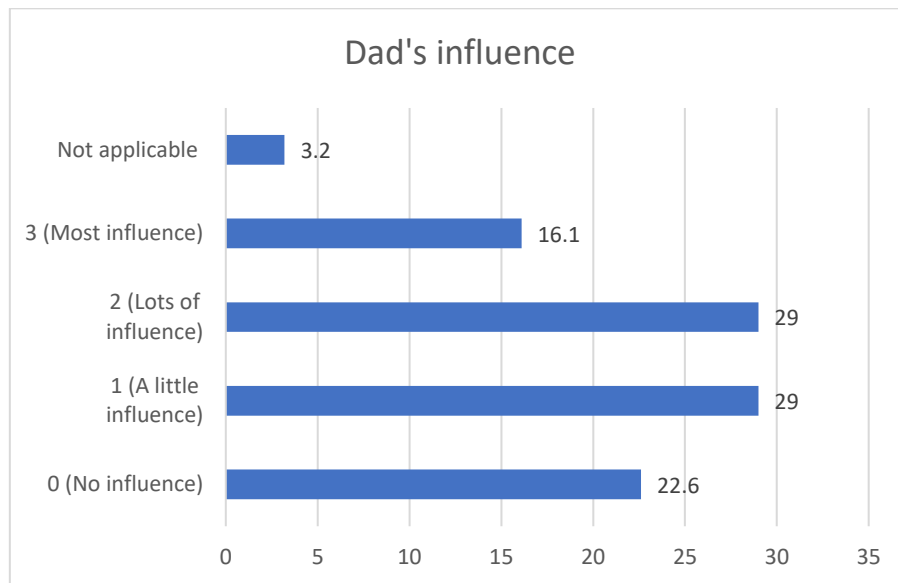| Category	Value
Not applicable	3.2
3 (Most influence)	16.1
2 (Lots of influence)	29
1 (A little influence)	29
0 (No influence)	22.6

Figure 12: Dad's influence

37.5% reported that their teachers had "lots of influence" (Figure 13) which is a higher percentage than the father's influence(Figure 12), and only 3.1% said their teacher had "no influence at all" (Figure 13).
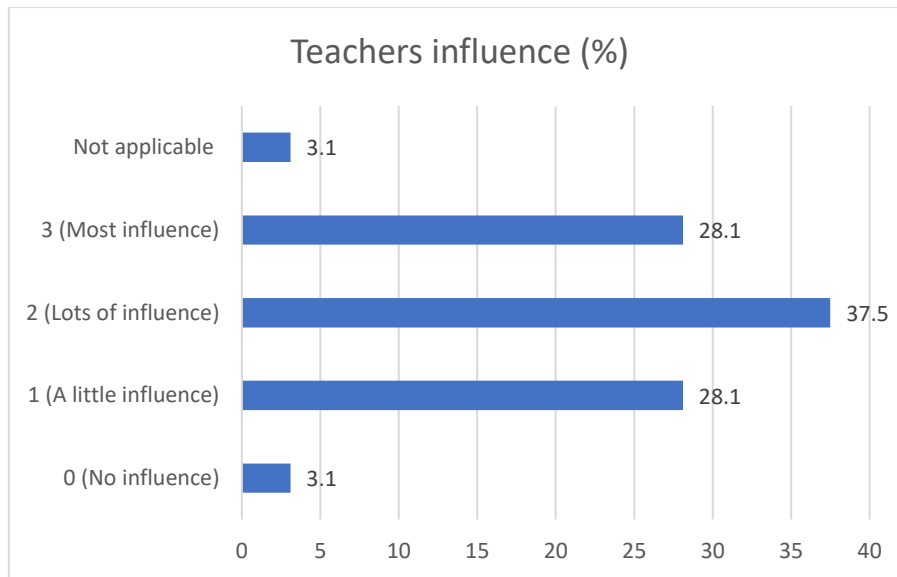
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Figure 13: Teacher's influence

On the one hand, 40% of the students said that their peer groups had "lots of influence". On the other hand, 33.3% of the students reported that the peer group had "no influence" on their decision-making (Figure 14). Among all the options (mum, dad, teacher, peer group and their selves) peer group had the highest ranking in "no influence".
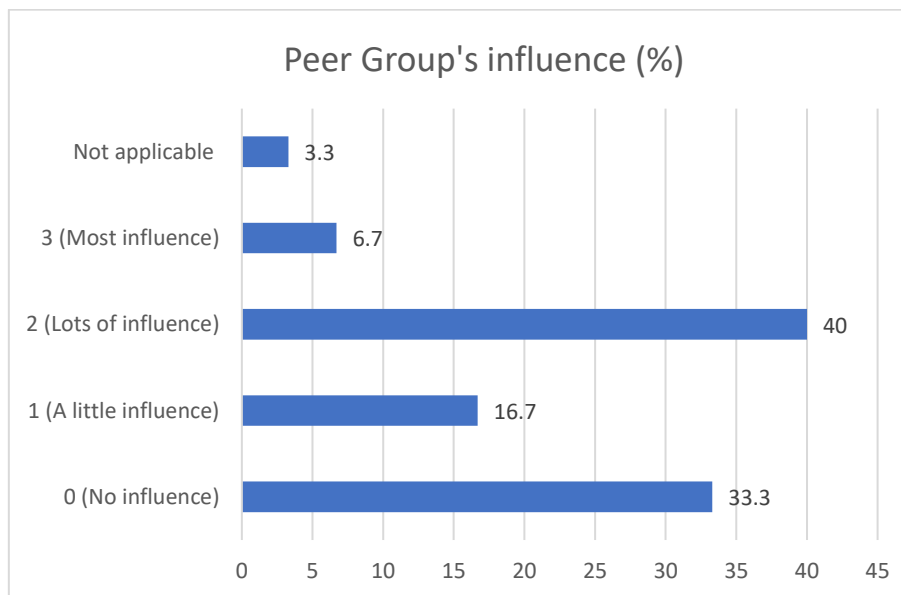

Figure 14: Peer Group's influence

Lastly, 40% of the students reported that their selves would have "lots of influence" their desire to pursue a career in STEM and, 36% said "the most influence" was themselves. Only 2% stated that their own beliefs would have "no influence" in the matter. This indicates us that the students' perceptions of study fields, career paths, how they perceive certain subjects (whether find it difficult or not) had the most influence when it comes to deciding to apply for a degree in HE or apply for a job.
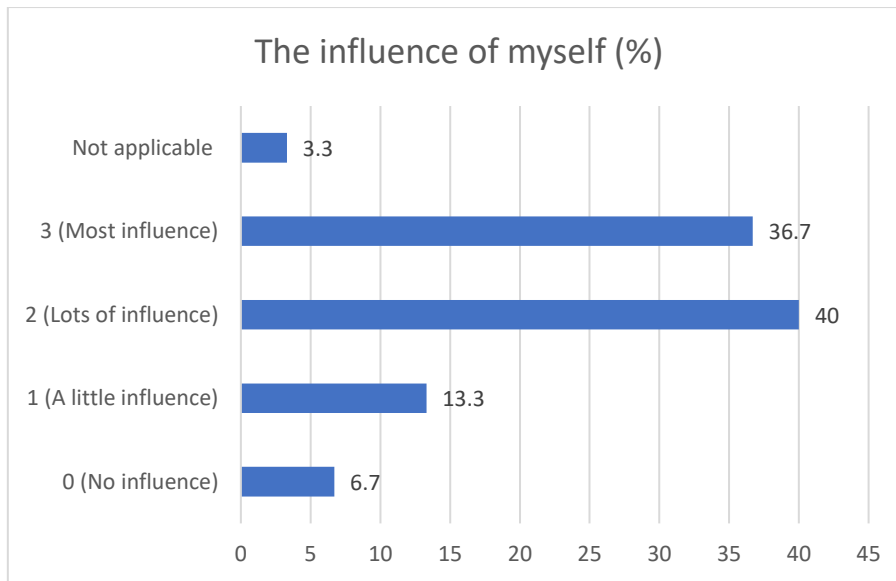
Figure 15: The influence of myself

Even though we may not be able to generalise the outcome of these based on 32 students' responses, it can help guide NCOP practitioners to consider the influences of parents, and teachers when designing and delivering activities. The students indicated that their parents and teachers had a significant level of influence, along with their own opinions, on their decision-making. It would also be valuable to arrange interventions with parents and teachers to have a more holistic approach to the NCOP programme.

Feedback on the overall event

The survey also asked questions about the event itself to find out whether the students benefited from attending the Girls into STEM day. We asked the students what they were hoping to achieve by attending the Girls into STEM day (Figure 16). 54% of the students stated that they were hoping to learn about different careers, and about different STEM subjects (25.8 %).
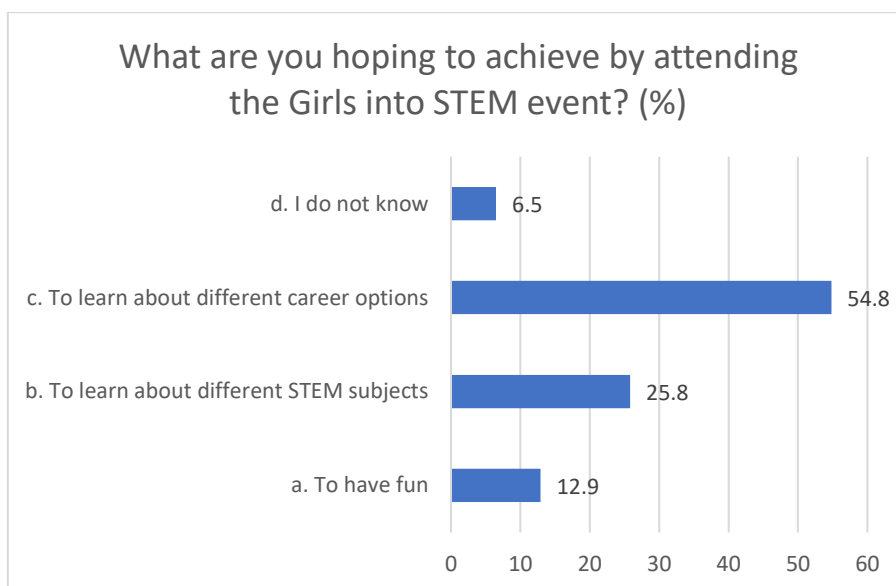

Figure 16: What are you hoping to achieve by attending the Girls into STEM event?

The majority of the students reported that by attending the event, they learnt about different career options that they were not aware of. For instance, one student said: "*It has made me realise that a lot of the jobs that are usually aimed towards men are largely available for women*" (GISS3). This is a significant insight in terms of encouraging more females into STEM careers. The female students may not know or believe that they could work in any STEM field they would inspire to work in as their male counterparts. Another student said: "*I don't know what job I want yet however, it has opened up my mind to go into jobs like this*" (GISS9). A couple of the students stated that attending the Girls into STEM event did not change their mind about STEM subjects since they were already "*interested in studying STEM*" (GISS2,6,10) However, most of the students said that it made them think more about more jobs/careers (GISS15). The next section presents the findings from another event, Pathways' 1851 SEAS Experience, which also had a STEM element to it.

Pathways 1851 High SEAS Experience

The 1851 High SEAS Experience took place between 2nd and 3rd of May 2019. Pathways partnered up with the 1851 Trust to provide an event that provided a unique combination of sailing and STEM activities. The event was advertised to years 9 to 11 cohorts. 42 students applied, 34 of whom were NCOP students. In total 36 students attended the two-day event. 28 students out of 36 were NCOP students. The ISII team designed pre- and post-surveys and visited a school in Leicester to conduct a storyboard activity (Appendix L). The pre- and post-surveys were given out before and after the event. 21 students completed the pre- surveys and 16 students completed the post-surveys. This section summarises the feedback from these surveys.

Surveys

Feedback on STEM

Like the other STEM event surveys (e.g., TBBN and Girls into STEM), we asked the students who influenced them in their decisions to pursue a career in STEM. 48% stated that it was their parents **Error! Reference source not found.** and 52% stated that it was their own decision **Error! Reference source not found.**. Only 19% said that their friends had been an influence in their decision to pursue a career in STEM (**Error! Reference source not found.**). 5% of the students said "others" but did not specify whom they meant by others. The students' ideas seemed to have the most influence and this was followed by their parents' influence.
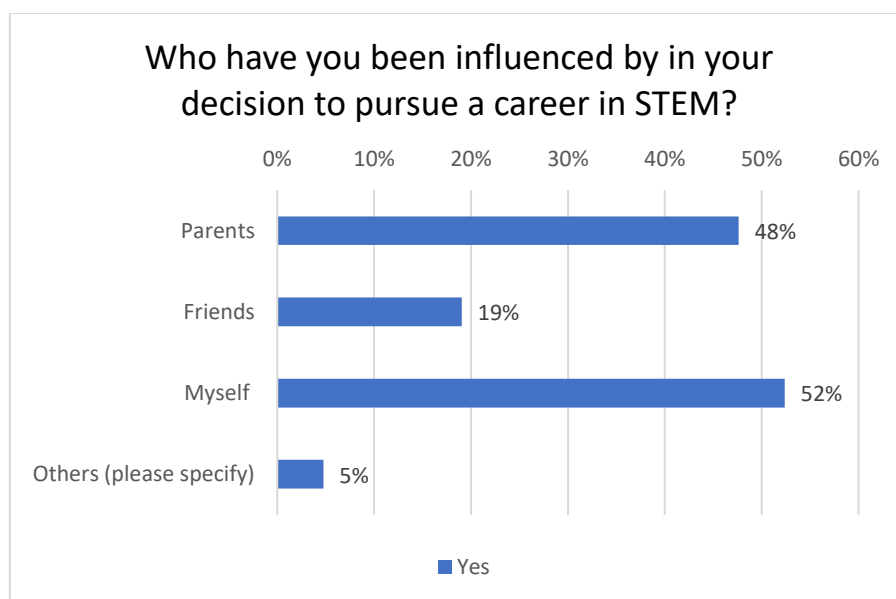

Figure 17: Who have you been influenced by in your decision to pursue a career in STEM?

The following question on the survey focused on the reasons why the students would consider studying a STEM subject. 67 % of the students said that their reason for studying a STEM subject would be "job potentials after graduation" (Figure 18). 19% of the students said that having a good salary would be their reason to study a STEM subject (Figure 18). Another 19 % of the students picked "STEM subjects are intellectually stimulating/challenging" for their reason to study a STEM subject. Having a "good salary" had the same response as "STEM subjects are intellectually stimulating/challenging" (19%). The students' main reason to study a STEM subject was to get a good job after finishing their studies (Figure 18).
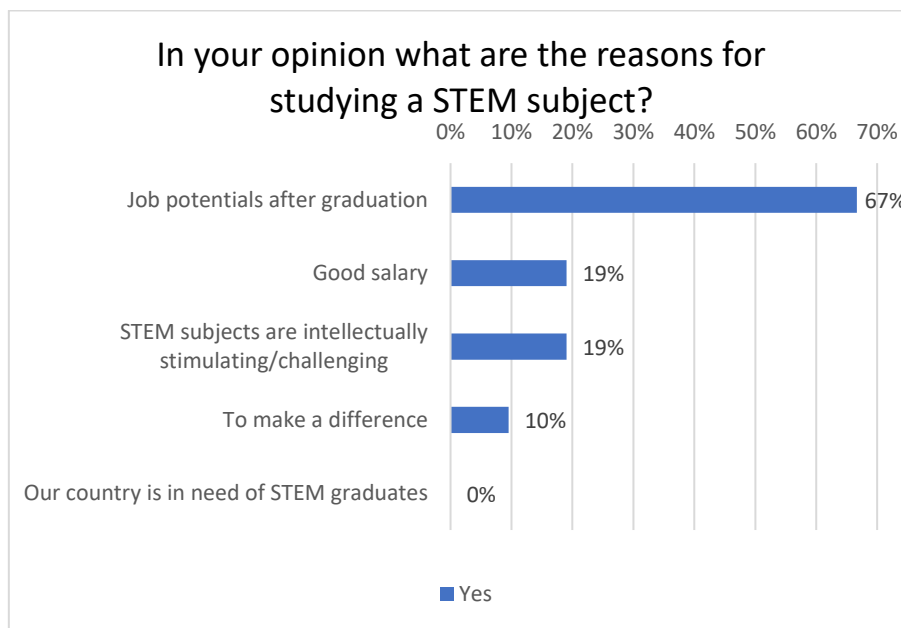

Figure 18: What are your reasons to study a STEM subject?

The last question about STEM subject focuses to see which STEM subject the students are interested in the most (Figure 19).

Which STEM subject are you interested in?

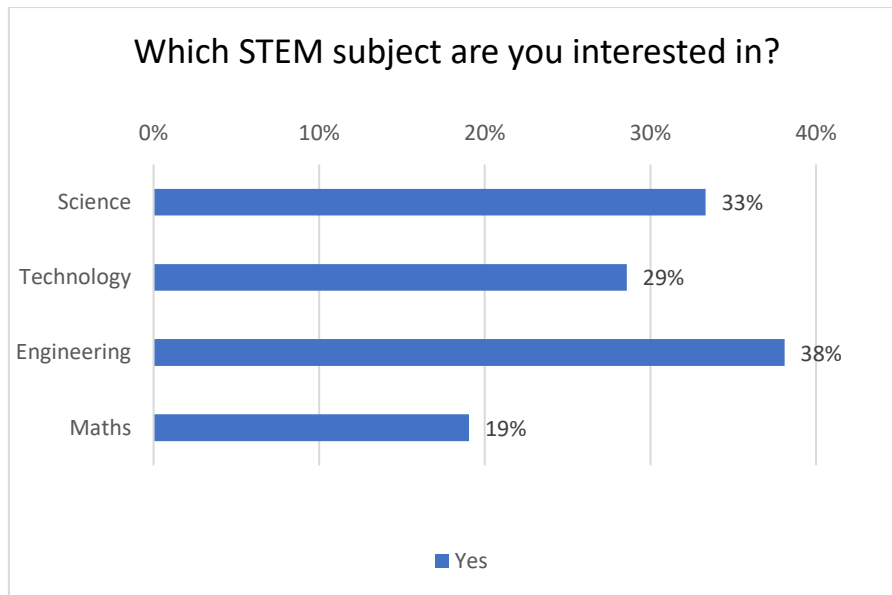|	
Science	33%
Technology	29%
Engineering	38%
Maths	19%

■ Yes

Figure 19: Which STEM subject are you interested in?

Figure 19 above shows that Engineering was the most popular STEM subject, with 38 % of the students interested in it followed by Science, preferred by 33% of students. The least preferred subject was Maths (19%). It could be that Engineering is more of a practical subject and most of the engineering companies offer apprenticeships to the students. Moreover, since the previous figure, Figure 18 indicated that the students' main reason to study a STEM subject is to find a job after graduation. The students could have the belief that holding an Engineering degree would increase their chances to find a good job.

Feedback on the overall event

All the students stated on their post surveys that the event met their expectations. One of the students even said that it exceeded their expectations saying that: "*I thought it would be a bit boring but not even when we weren't sailing it was so fun*" (1851S5)*. Overall feedback was that the students enjoyed the event, especially the sailing. One said: "*I enjoyed sailing because I hadn't done it before*" (1851S5). Another said: "*I enjoyed sitting in a speed boat and hope to get a speed boating license in the future*" (1851S6). This indicates that the event inspired this student and made them think about getting a new skill in the future. One of the students also stated that they loved the activity since "it has given me the skills to operate a boat and all the technology behind it all" (1851S7). The majority of the students reported that the reason why they enjoyed the event was that it was something they had never done before and they enjoyed learning new things.

Storyboards

One of the reasons why the ISII team wanted to use storyboards as part of the evaluation was to encourage students to provide more insight about their experiences, as, the activity allows students to communicate difficult ideas and concepts such as aspirations, class /socio-economic differences, identity, cultural/social capital from their perspectives which they may not have the ability to do so through giving written answers on a survey. The method can also allow researchers and participants to see change, or not, over time. Analysing students' drawings, looking at the similarities and differences in their responses help researchers to understand better what these students lack to achieve more and encourage them to do more with their future.

Five students, identified by teachers who attended the activity, joined the researchers for the storyboard sessions. When we analysed the storyboards that the students drew on, we looked at to

23

see if there were any differences or similarities before and after they attended the event. The pre- and post-storyboard activity indicated that the students' background and their heritage (if they a BAME background) was significant to them. All the students drew flags of the countries their parents or themselves migrated from. The students emphasised the importance of their families and one of the students even wrote: "*my family are the most important people in my life*" (S1). The students' storyboards showed us that for these students their families have a big impact on their lives. Some of the students noted that they find school stressful, especially during exam periods. Both in the pre-and post-storyboard activity, all five students wrote on their A3 papers that they would like to go to university in future. One said: "*I hope to go to university when I am older and get a good job*" (S2). They all associated having a good and successful life with going to university and they all believed that in future they would be attending university.

At the end of the storyboard activity, the ISII team members also had a conversation with the students specifically about 1851 High Sailing event to get their feedback. All five students emphasised the fact that they enjoyed the sailing experience. One of them stated that it inspired them since they had not done anything like sailing before (S1). Their teacher also separately commented that it was a good opportunity for their students and that they had enjoyed the experience.

Commando Joe's

Working with 1000 schools nationally (Commando Joe's, 2019), Commando Joe's (CJ) is a military-ethos intervention aiming to enhance engagement in learning and educational attainment (Mills et al., 2015). Commando Joe's is aimed at engaging students who are often disengaged with their studies with activities that link teamwork with physical exercise and teach life skills, as well as discipline. In Northamptonshire, as part of NCOP, Commando Joe's work with 10 schools on a weekly basis, with 457 students taking part in the programme. To assess the impact of this intervention a range of methods were utilised, firstly, three surveys: T1, T2 and T3. These surveys have the same content but they are done at different time intervals to assess longitudinal impact. T1 surveys were distributed to the students in September and are designed to learn students' views on CJ before they start the intervention.

Overall, 186 students completed the T1 surveys, the data available for the evaluation was reduced due to issues with data protection at one school meaning their students data was unavailable. Students who joined the programme after the original assemblies counted toward the number partaking in the activity, but did not complete a T1, though data were collected over the next two stages. T2 surveys were given out in January, yet some of the schools could not complete T2 in time, since their instructors changed and they had a break in their programme. T3 were given out in July, at the end of the intervention. Of the students that completed the T1 survey, 104 lived within NCOP targeted wards, 115 were male, 70 females and 1 transgender. Of the students that completed the T2 survey, 50 lived within NCOP targeted wards, 58 were male, 26 were female, with 2 additional students being transgender. Of the students that completed the T3 survey,112 lived within NCOP targeted wards, 102 were male and 86 were female.

Qualitative Data

This section reports the findings qualitative responses from the surveys, especially T3 surveys, and from the focus groups. The ISII team conducted two focus groups in one of the schools with 5 NCOP students who were taking part in CJs. These students were contacted twice in six months to see if there were any CJ inspired behavioural changes or any other improvements that could be attributed to the programme. The first focus group took place in December and the second one took place in April.

Five NCOP students, from one of the schools in Northampton, who are all taking part in the CJs intervention, were selected by their teacher to take part in a focus group as part of the data collection. The students were all female and the focus group lasted around 40 minutes each time. The main theme for the focus groups was that the students discussed CJs, their schooling and plans. All of them were very positive about CJs, they stated that it was a good break from their everyday routine and it was something different than just going into their classes (CJS1,2,3,4,5). All the students mentioned the fact that their activity leader was very good at involving all the students in the activities and made sure that they all participated. One student said: "*I love Monday mornings now that we do CJs*" (CJS1). One of the students emphasised the fact that attending Commando Joe's taught them new skills: "*You get to talk and learn new things that you do not learn in your lessons*" (CJS3). The only constructive feedback the students made, when asked if there was anything to improve or change about the activity, they mentioned that sometimes the sessions focused too much on one subject such as communication. One of the students said: "*For the whole time we did communication, it lingered for too long*" (CJS2). Another student made a similar comment, said: "*It would be nice to have different subjects and not focus only on communication skills*" (CJS1).

However, when the same students were contacted six months later, the responses were changed positively. The students stated that they have been introduced different topics and their activity leader was changed during the programme which seemed to have a positive impact on their experience. As one student put:

> "*It is more active now, we are doing more survival stuff now, so it more fun now. We learn and understand about how we can help ourselves in different situations it is definitely better than sitting in a classroom all the time*" (CJS2).

One of the students said, "*I cannot wait to come to school the day we have CJs*" (CJS3). When we examined the surveys, the students' responses from the T3 surveys were more positive and it was visible to the researchers that the students put more effort in answering the questions. The majority of the students mentioned that their instructor made a significant difference in their personal improvement. One student said: "*Our instructor was amazing and pushed us, this helped me improve*" (CJS153). Another student said: "*The fitness and physical sessions I really liked. The instructor was nice and was easy to talk to which improved my communication skills*" (CJS70). The students also mentioned that the activity helped them with their self-confidence and communication skills. As one student put: "*Commando Joe's has made me feel confident in my school and has made me want to communicate more*" (CJS58). Another student said the activity helped the with: "*Being able to open and more confident being relaxed and having helped my self-esteem.*" (CJS16). The six-month difference between two focus groups indicated that the longer students stayed in the programme the better they felt about the sessions. More importantly, having a good instructor encouraged them more to take part in the sessions.

The next section summarizes the findings from the quantitative data collection.

Quantitative Data

The surveys completed by the students who attended the Commando Joe's activity also contained a quantitative section which measured their attitudes toward the programme prior to starting and upon completion. The students were asked to how strongly they agreed with a selection of set statements on a scale of 1 to 5, with 5 being 'Strongly Agree'. In each case both the NCOP and non-NCOP students were more likely to agree with the statements post event than they were prior.
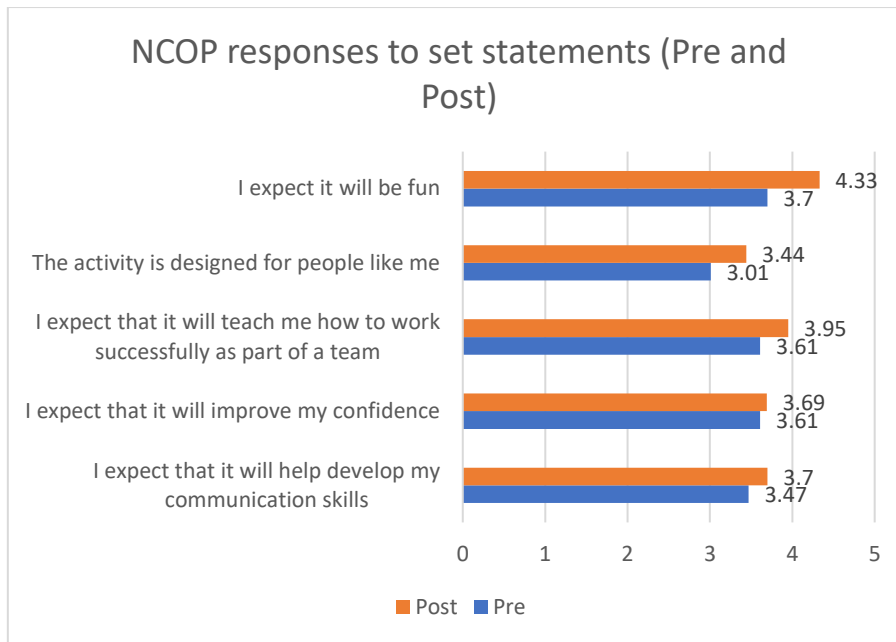
Figure 20: Graph showing NCOP students agreeability to set statements (pre- and post event)
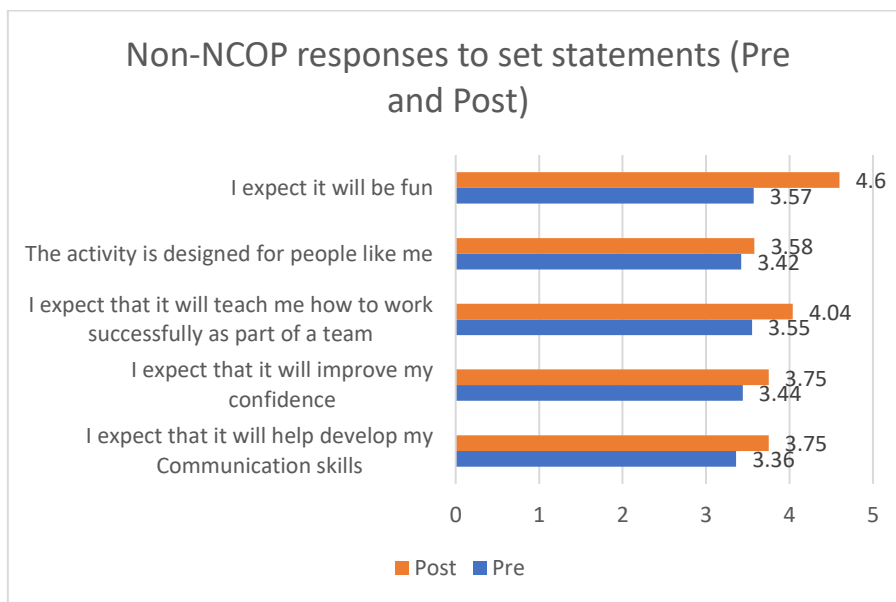

Figure 21: Graph showing non-NCOP students agreeability to set statements (pre- and post event)

YSA GO Camp

The YSA GO Camp took place in Loughborough over the course of 5 days. The YSA Go Camp was an opportunity offered to Year 9 students to complete the 'Go' level of the Youth Sport Trust's Youth Sport Award. This is a unique reward and recognition scheme for young people to evidence their learning, progress and achievement in and through sport. By taking part, young people sought to build key transferable skills such as communication, team work and leadership, and promote healthier living in and through sport (Pathways, 2019). Appendix O shows pictures from the event.

Pre- and post-event surveys were and the cohort attending the YSA Go Camp were asked to rate their own knowledge of a variety of university related topics. The cohorts were made of a total of 23 students which has been split into 4 separate groupings; Male (*n=6*), Female (*n=16*), NCOP (*n=13*) and non-NCOP (*n=3*). Of the cohort, one student preferred not to give their gender, and 7 were not able to be linked to the NCOP criteria due to not giving a postcode on either of the surveys, these students have been included in "all", but where relevant, they have not been included in the broken-down cohorts:

Overall, the students that attended felt that their knowledge had increased after attending the event.
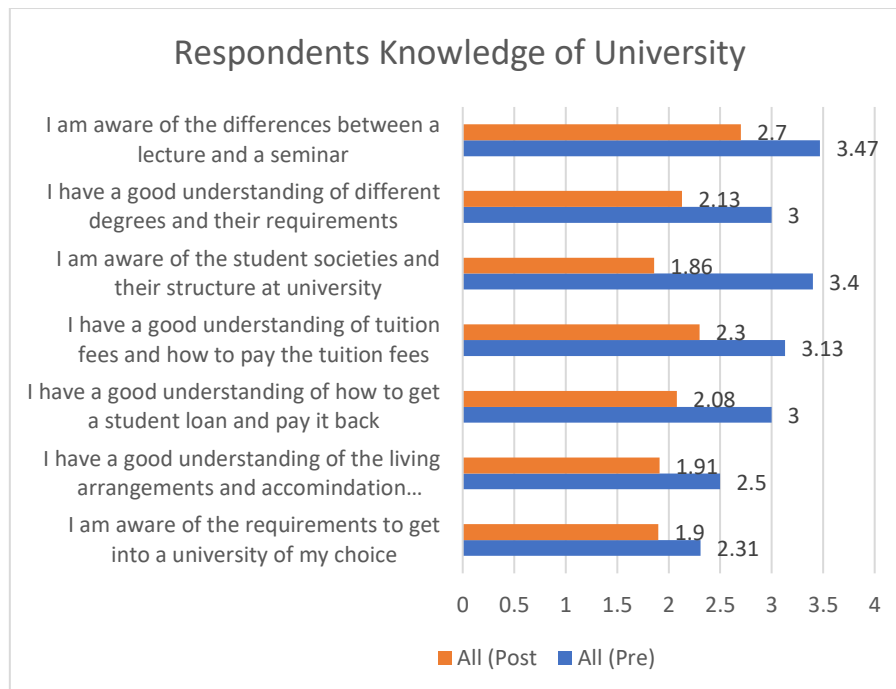

Figure 22: Respondents knowledge of University (The lower the score the more confident the respondent)

For males, two topics, *"I have a good understanding of the living arrangements and accommodation choices at university"*, and *"I am aware of the differences between a lecture and a seminar"* saw a decrease in their knowledge, whereas the female cohort saw significant increases for each topic.
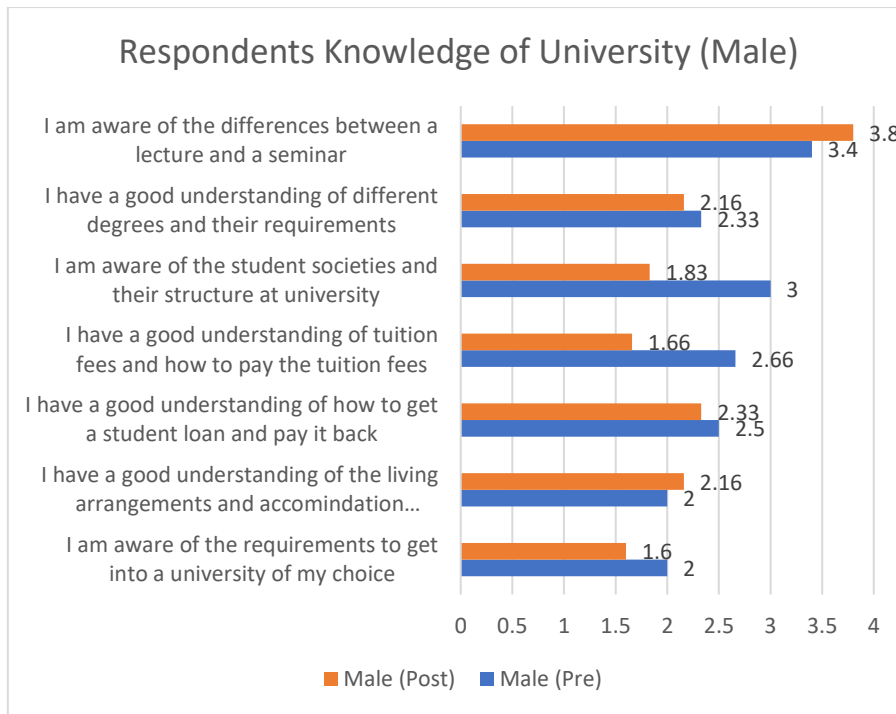
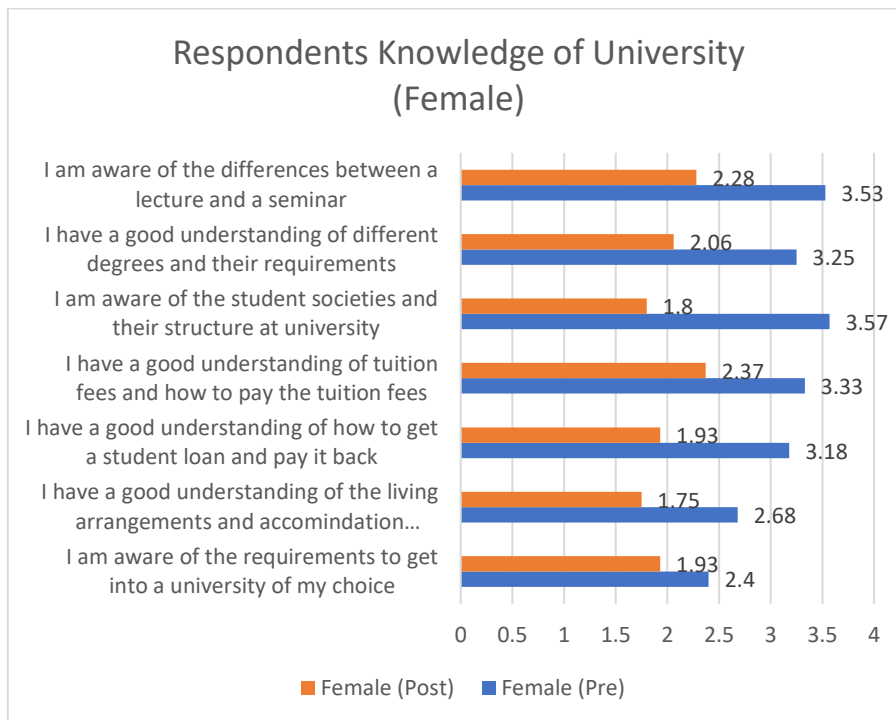*Figure 23: Respondents knowledge of University (The lower the score the more confident the respondent)*

Figure24: Respondents knowledge of University (The lower the score the more confident the respondent)

The NCOP students saw increased confidence in each category, however, the non-NCOP cohort saw increases in only 3: *"I have a good understanding of tuition fees and how to pay the tuition fees"; "I*

am aware of student societies and their structure at university"; "I have a good understanding of different degrees and their requirements".
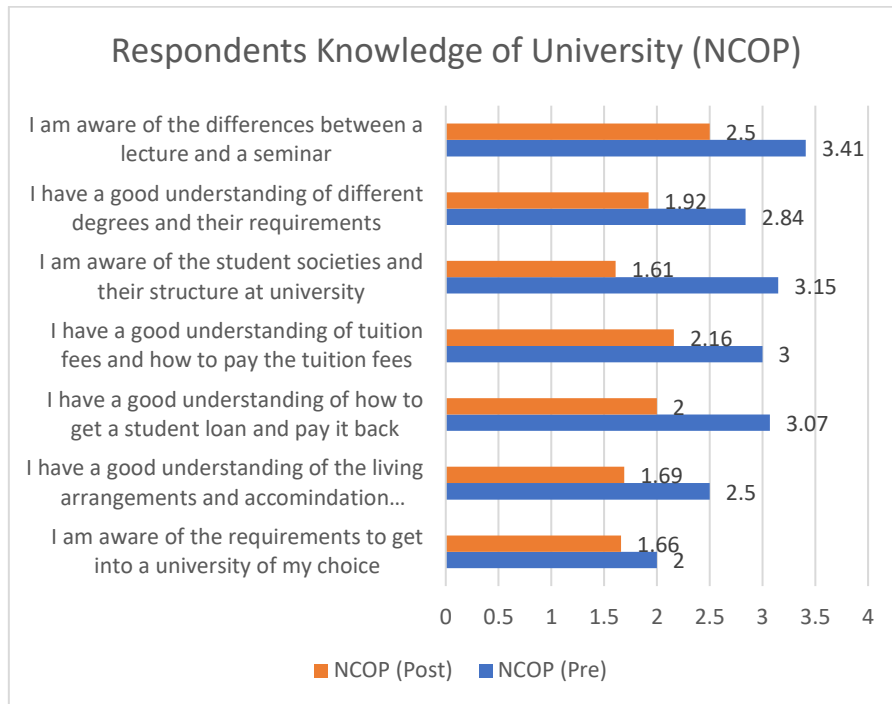
Respondents Knowledge of University (NCOP)

Statement	NCOP (Post)	NCOP (Pre)
I am aware of the differences between a lecture and a seminar	2.5	3.41
I have a good understanding of different degrees and their requirements	1.92	2.84
I am aware of the student societies and their structure at university	1.61	3.15
I have a good understanding of tuition fees and how to pay the tuition fees	2.16	3
I have a good understanding of how to get a student loan and pay it back	2	3.07
I have a good understanding of the living arrangements and accomindation…	1.69	2.5
I am aware of the requirements to get into a university of my choice	1.66	2

■ NCOP (Post) ■ NCOP (Pre)

Figure 25: Respondents knowledge of University (The lower the score the more confident the respondent)

Respondents Knowledge of University (non-NCOP)

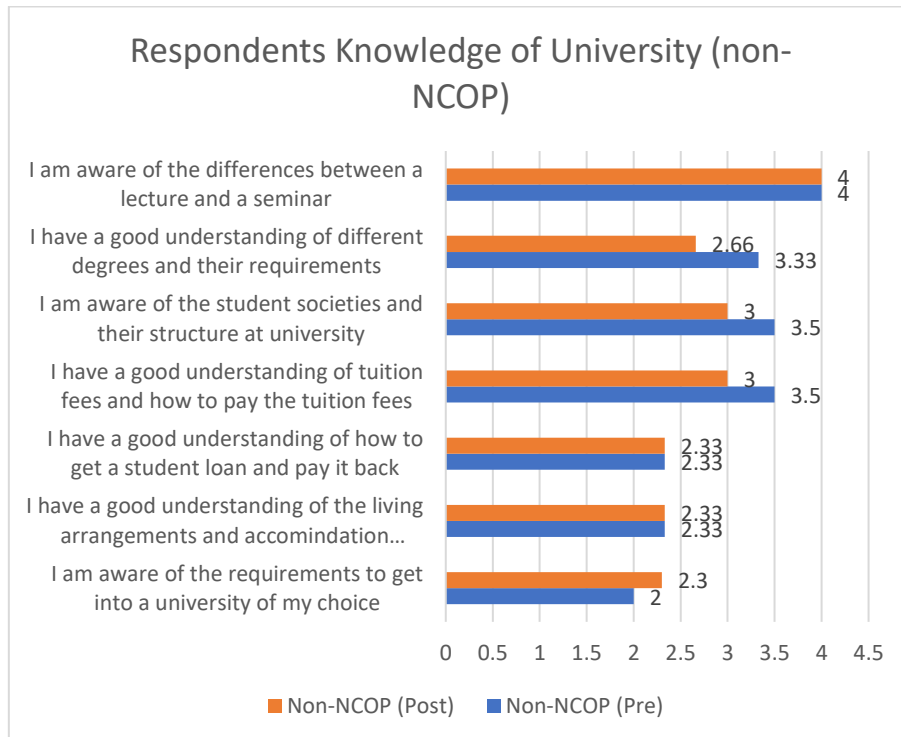| Statement	Non-NCOP (Post)	Non-NCOP (Pre)
I am aware of the differences between a lecture and a seminar	4	4
I have a good understanding of different degrees and their requirements	2.66	3.33
I am aware of the student societies and their structure at university	3	3.5
I have a good understanding of tuition fees and how to pay the tuition fees	3	3.5
I have a good understanding of how to get a student loan and pay it back	2.33	2.33
I have a good understanding of the living arrangements and accomindation…	2.33	2.33
I am aware of the requirements to get into a university of my choice	2.3	2

■ Non-NCOP (Post) ■ Non-NCOP (Pre)

Figure26: Respondents knowledge of university (The lower the score the more confident the respondent)

A comparison between the NCOP and non-NCOP cohorts shows different level of confidence in their knowledge pre-event. The NCOP cohort showed more confidence in their knowledge in 4 categories (*"I have a good understanding of tuition fees and how to pay the tuition fees", I am aware of the student societies and their structure at university", I have a good understanding of different degrees and their requirements", and "I am aware of the differences between a lecture and a seminar")* whereas the non-NCOP cohort were more confident in two categories (*"I have a good understanding of the living arrangements and accommodation choices at university", "I have a good understanding of how to get a student loan and pay it back").* However, post-event, the NCOP cohort was more confident in their knowledge of the university topics compared to their non-NCOP colleagues in each of the topics.
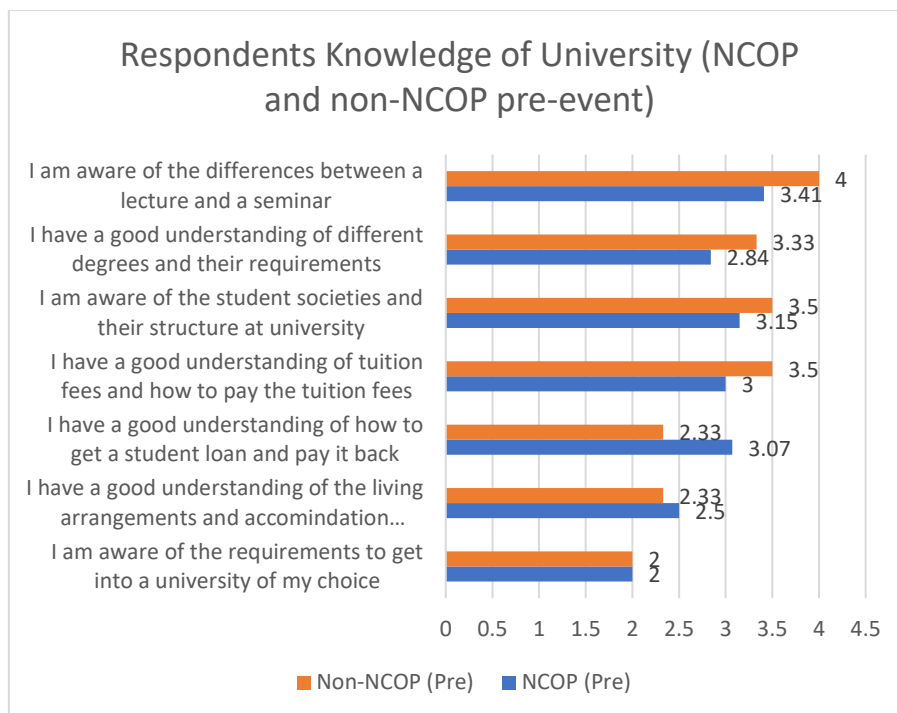

Figure27: Respondents knowledge of university (The lower the score the more confident the respondent)
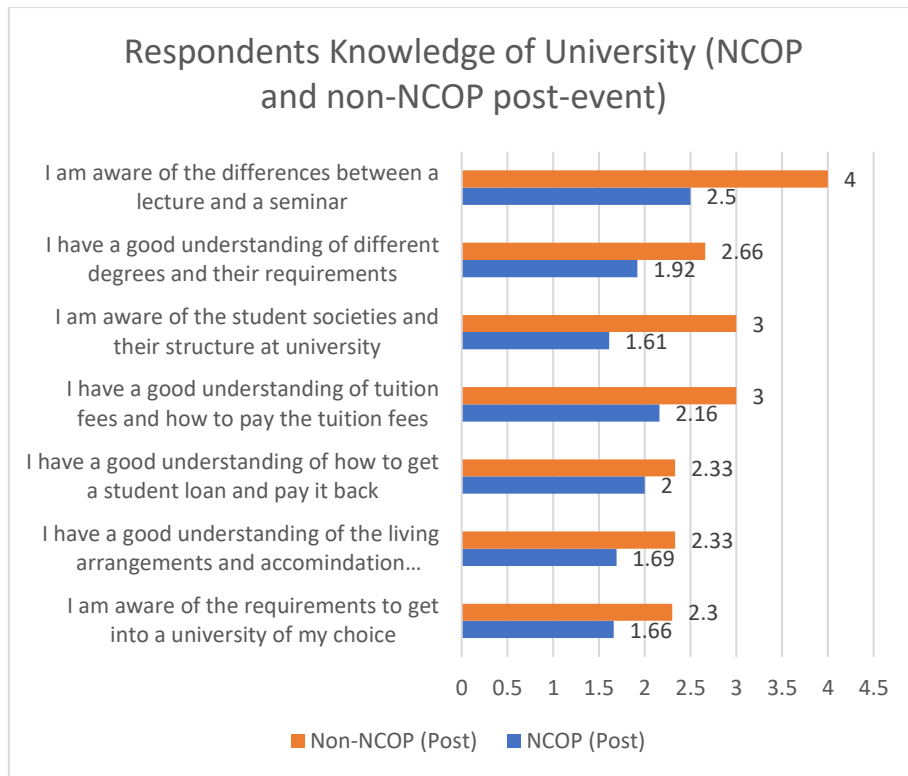
Respondents Knowledge of University (NCOP and non-NCOP post-event)

	Non-NCOP (Post)	NCOP (Post)
I am aware of the differences between a lecture and a seminar	4	2.5
I have a good understanding of different degrees and their requirements	2.66	1.92
I am aware of the student societies and their structure at university	3	1.61
I have a good understanding of tuition fees and how to pay the tuition fees	3	2.16
I have a good understanding of how to get a student loan and pay it back	2.33	2
I have a good understanding of the living arrangements and accommodation…	2.33	1.69
I am aware of the requirements to get into a university of my choice	2.3	1.66

Figure28: Respondents knowledge of university (The lower the score the more confident the respondents)

In terms of the confidence the cohorts had in the highlighted skills, YSA Go camp saw an overall increase in each category.
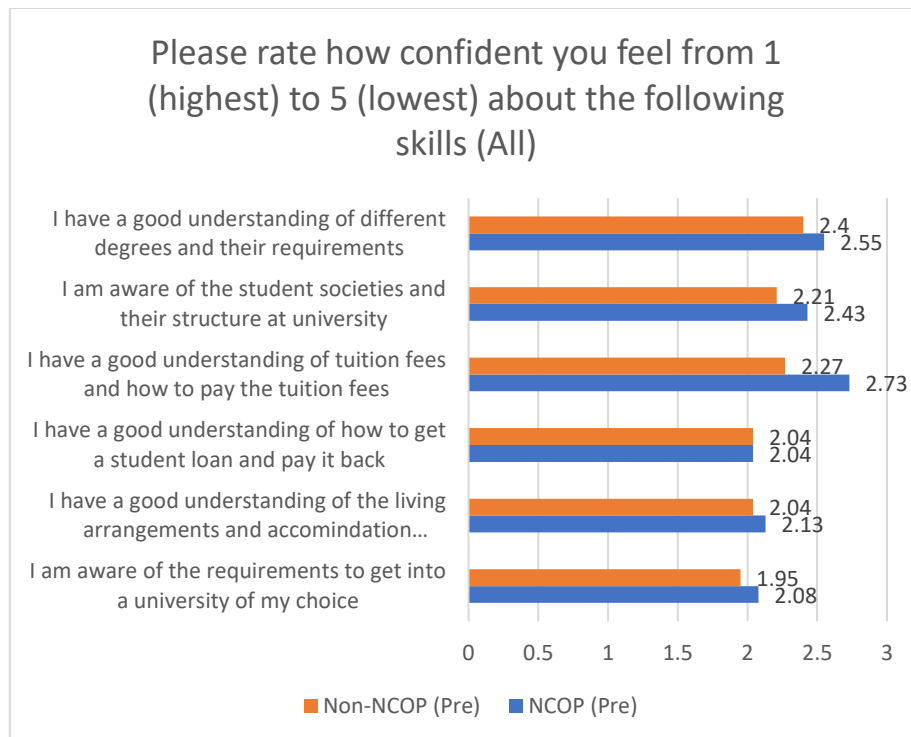
Please rate how confident you feel from 1 (highest) to 5 (lowest) about the following skills (All)

	Non-NCOP (Pre)	NCOP (Pre)
I have a good understanding of different degrees and their requirements	2.4	2.55
I am aware of the student societies and their structure at university	2.21	2.43
I have a good understanding of tuition fees and how to pay the tuition fees	2.27	2.73
I have a good understanding of how to get a student loan and pay it back	2.04	2.04
I have a good understanding of the living arrangements and accommodation…	2.04	2.13
I am aware of the requirements to get into a university of my choice	1.95	2.08

The female cohort saw increases in all the categories, except for communication skills, which saw a drop-in confidence. Like the female cohort, the males saw increases in confidence in all but one category (solving problems and negotiating).
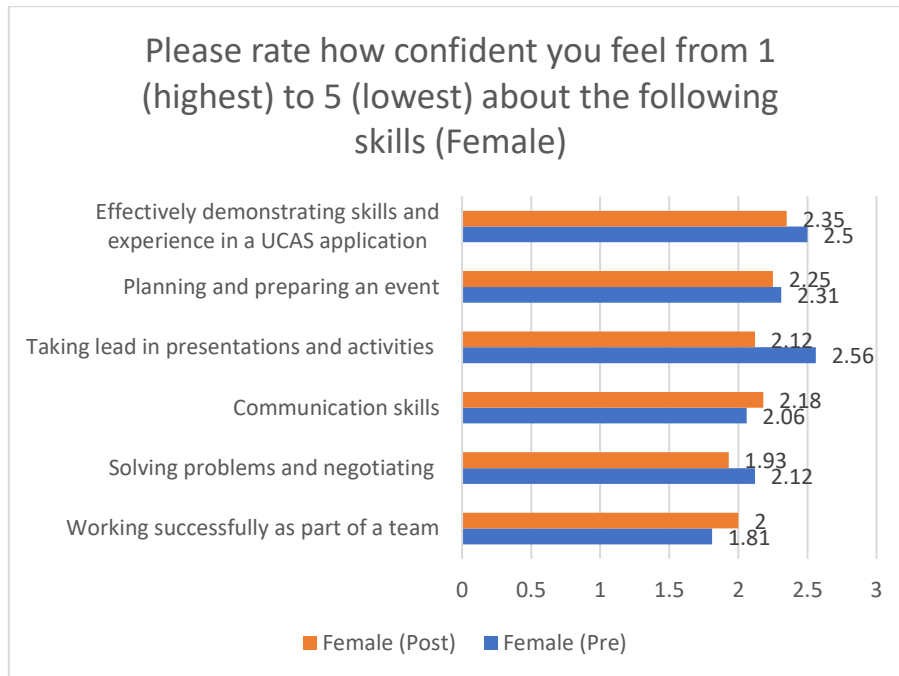

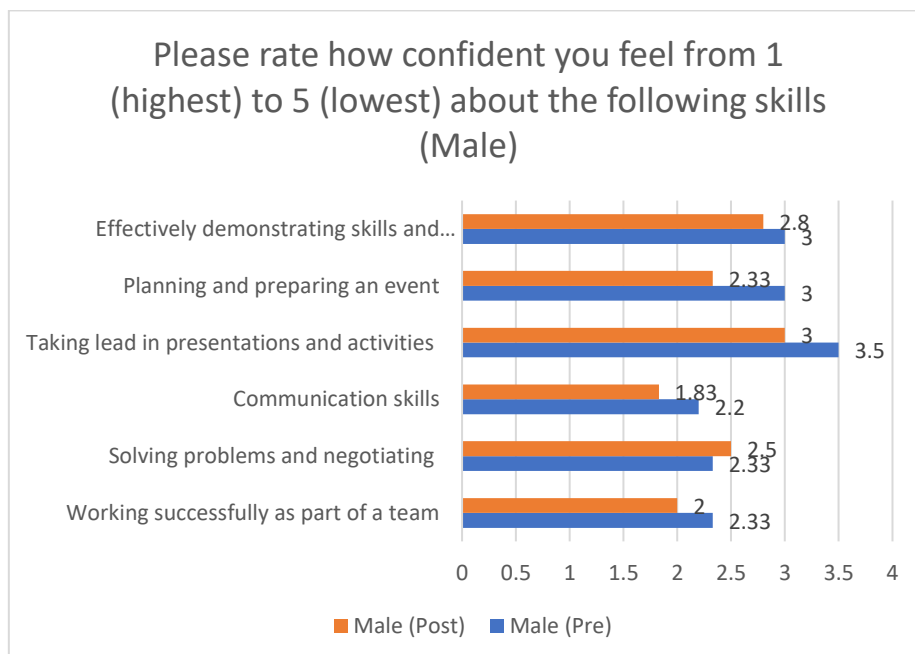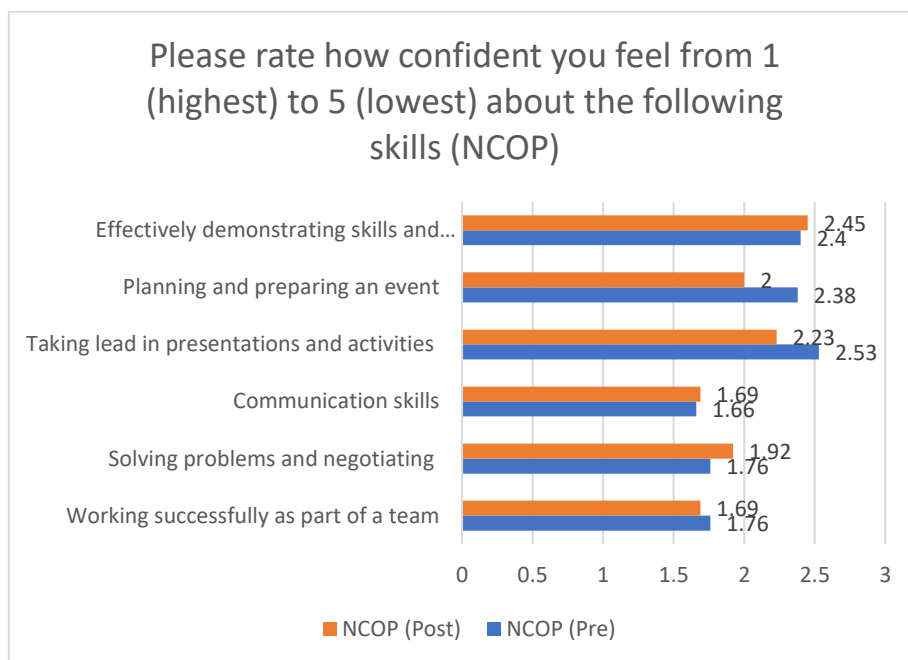Figure30: Respondents confidence regarding their skills (The lower the score the more confident the respondent

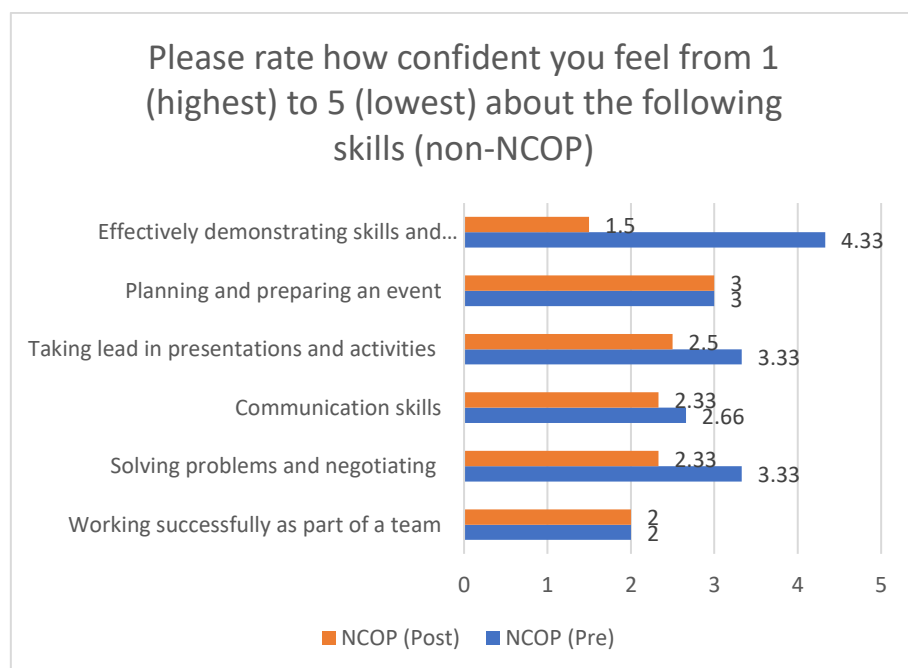Figure31: Respondents confidence regarding their skills (The lower the score the more confident the respondent

Although overall confidence increased for all cohorts that attended YSA Go Camp, the NCOP cohort saw a mixed outcome. Although their confidence was given a boost regarding their confidence in planning and preparing an event, taking the lead in presentations and activities, and working successfully as part of a team, it dropped when they were asked about solving problems and negotiating, communication skills, and effectively demonstrating skills and experience in a UCAS application. For the non-NCOP cohort, there was no reduction in confidence in any category, although it remained static for working successfully as part of a team, and planning and preparing an event (both being categories where the NCOP cohort saw a rise in confidence).

Figure32: Respondents confidence regarding their skills (The lower the score the more confident the respondent

Figure 33: Respondents confidence regarding their skills (The lower the score the more confident the respondent

The qualitative responses from the post-event surveys indicated that attending YSA GO Camp improved the students' confidence and made them more comfortable presenting their ideas in front of other people. One student noted: "*the most useful thing about YSA GO Camp was improving my confidence so I can speak in front of other people*" (YSAS12). Another student made a similar comment: "*Meeting new people improved my confidence*" (YSAS4). The majority of the students also stated that they enjoyed the "team challenge" activity since it helped them meet new people and learn how to work in teams. The students also reported that talking about their skills and leading on sessions helped them to be more thoughtful and confident. There were not any comments provided from students that were critical or negative, they all reported on their post-event surveys that the activity was fun and they enjoyed teamwork and meeting new people.

English and Maths Mentoring

The English and Maths mentoring programme focused specifically on students who live in NCOP ward areas and have the potential to go into Higher Education. The programme aims to engage with a minimum of eight high priority NCOP schools in Leicestershire. A team of mentors are recruited from the University of Leicester, De Montfort University and Loughborough University. The mentoring scheme ran from October 2018 to May 2019. This section only reports on the data that was collected from December 2018 to May 2019. The data that had been collected from September to November 2018 was already reported in our previous report (December 2018).

68 students from Leicestershire completed a post-event survey to give their feedback on their English and Maths sessions with their mentors. We also conducted focus groups with two schools which are analysed and reported in this section.

Surveys

The surveys showed that 37% of the students "agreed" that after attending their mentoring sessions they felt more confident that they could pass their Maths GSCE (Figure 34). 22% of the students "strongly agreed" that they were confident to pass their Maths GSCE (Figure 34).
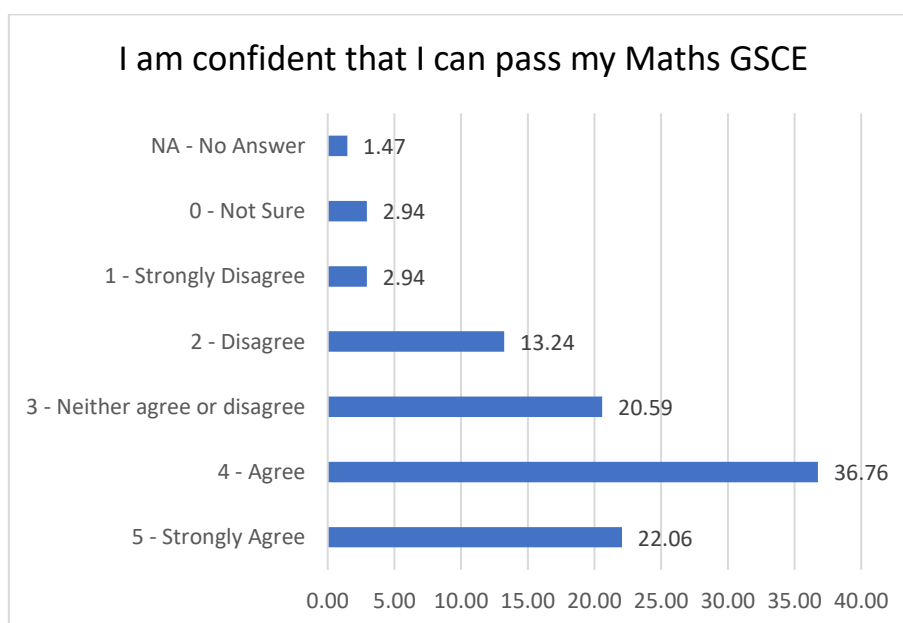

I am confident that I can pass my Maths GSCE

Response	Value
NA - No Answer	1.47
0 - Not Sure	2.94
1 - Strongly Disagree	2.94
2 - Disagree	13.24
3 - Neither agree or disagree	20.59
4 - Agree	36.76
5 - Strongly Agree	22.06

When asked if the students understand the importance of their Maths GCSE after attending their mentoring scheme, 60% said they "strongly agreed" that they understood the significance of it. 22% also said they "agreed" (Figure35).
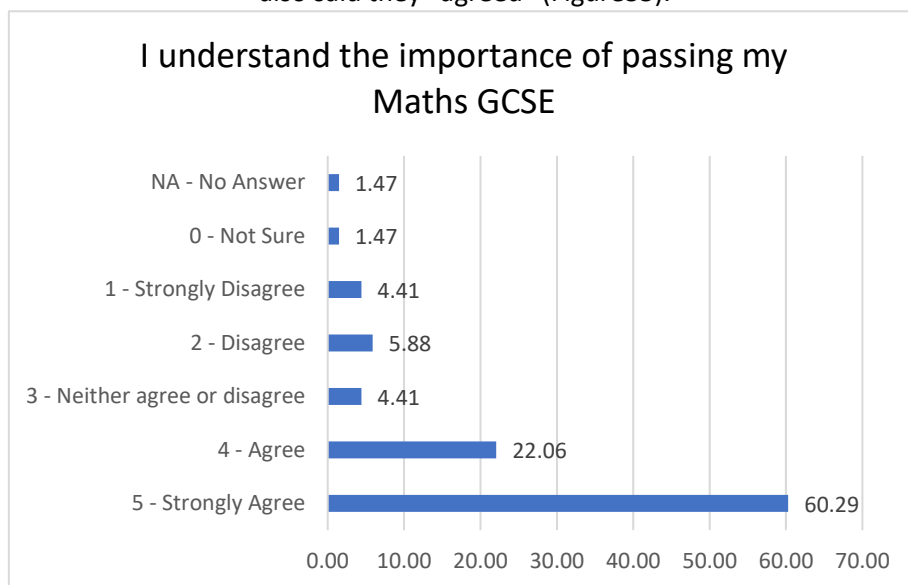
I understand the importance of passing my Maths GCSE

Response	Value
NA - No Answer	1.47
0 - Not Sure	1.47
1 - Strongly Disagree	4.41
2 - Disagree	5.88
3 - Neither agree or disagree	4.41
4 - Agree	22.06
5 - Strongly Agree	60.29

Figure35: Understanding the importance of my Maths GCSE

Similar responses were given when the students asked about their English GSCE. Figure36 below indicates that 60% of the students said they were confident that they could pass their English GSCE after attending their mentoring scheme.

I am confident that I can pass my English GSCE

Response	Value
NA - No Answer	1.47
0 - Not Sure	1.47
1 - Strongly Disagree	4.41
2 - Disagree	5.88
3 - Neither agree or disagree	4.41
4 - Agree	22.06
5 - Strongly Agree	60.29
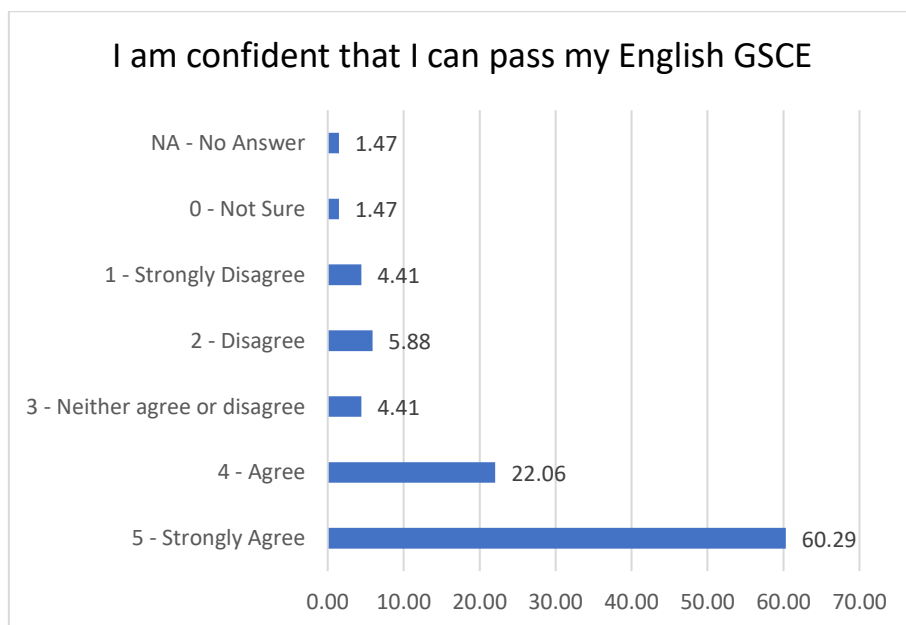
Figure36: Confident that I can pass my English GSCE

The qualitative responses from the post-survey also showed that the majority of the students studying English were content with their mentors. One of the students said: *"My mentor helped me with everything. I think she did very well and helped me in English"* (EMS70) and another student said: *"My*

mentor helped me understand my English work and helped me extend my answers to get more marks" (EMS16). There were other positive comments such as *"My mentor helped with getting to know what we need to work on and we did multiple things e.g. articles and revision in English test"* (EMS13), and *"my mentor helped me with English and she teaches very well and helped me on how to write better"* (EMS14).

When the students were given the statement "I understand the importance of passing my English GSCE" 60% of the "strongly agreed" (Figure 37).

I understand the importance of passing my English GCSE

Response	Value
NA - No Answer	1.47
0 - Not Sure	1.47
1 - Strongly Disagree	4.41
2 - Disagree	5.88
3 - Neither agree or disagree	4.41
4 - Agree	22.06
5 - Strongly Agree	60.29
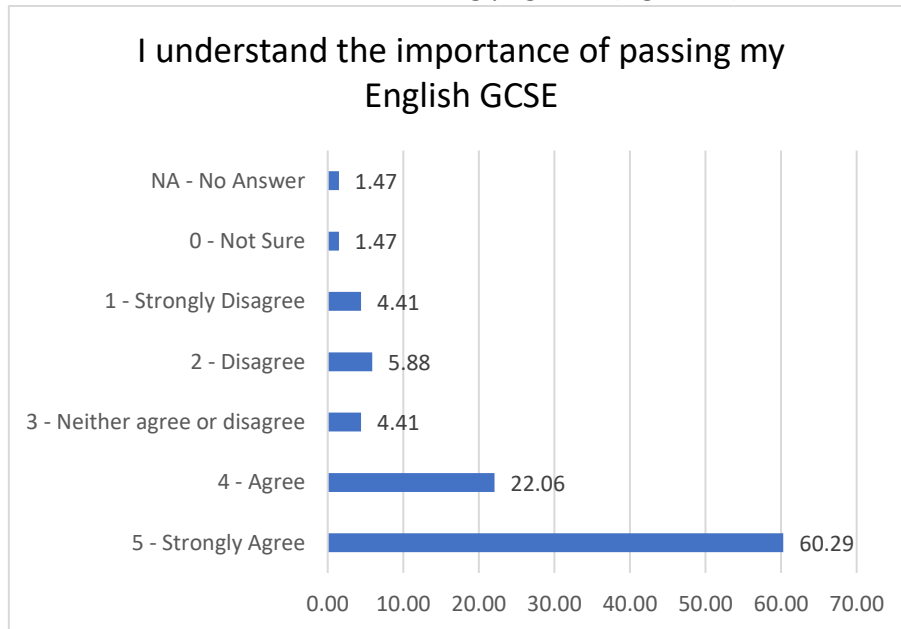
Figure37: Understanding the importance of passing my English GCSE

As Figure 38 below indicates 60% of the students "strongly agreed" that they enjoyed working with their mentors. 22.6 % of the students also "agreed" that they enjoyed working with their mentors. Only 4.41% of the students said that they "strongly disagreed" with the statement "Overall I enjoyed working with my mentor" (Figure 38).

Overall I enjoyed working with my mentor

Response	Value
NA - No Answer	1.47
0 - Not Sure	1.47
1 - Strongly Disagree	4.41
2 - Disagree	5.88
3 - Neither agree or disagree	4.41
4 - Agree	22.06
5 - Strongly Agree	60.29
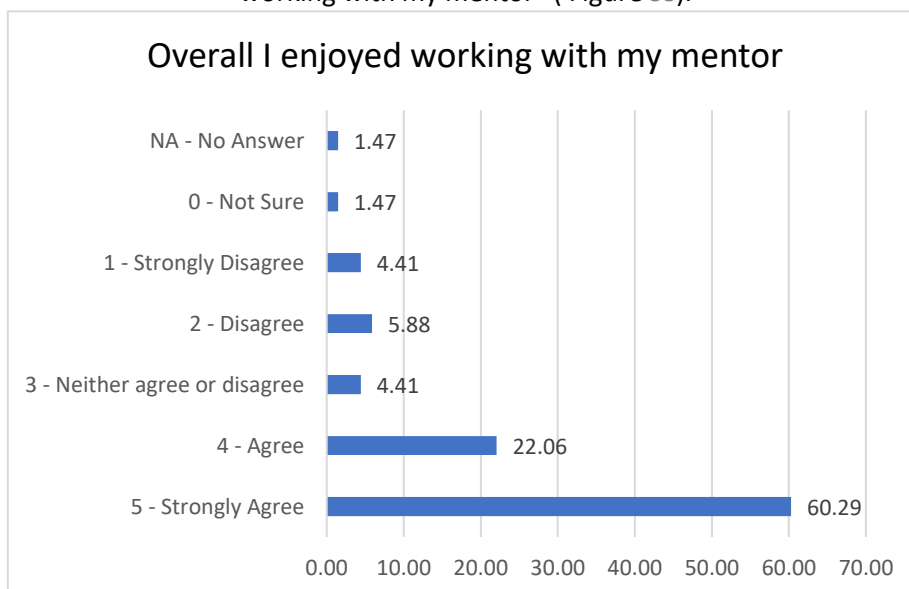
The students were also asked to tell us about their least favourite session (if there was one) in the scheme and explain why. However, the majority of the students wrote that they enjoyed all the sessions and they did not have a least favourite session. As one student said: "*None, I learnt something from all of my sessions*" (EMS9). Another said: "*There hasn't been a session I did not enjoy*" (EMS10). Overall the students attended the mentoring scheme enjoyed their sessions with their mentors and improved their Maths and English skills.

The next section summarizes the findings from the two focus groups conducted in Leicester.

Focus Groups

The ISII team conducted two focus groups in Leicester. The school the ISII team visited first had 6 students who were taking part in the English and Maths mentoring scheme agreed to be part of the focus group. The students asked to talk about the overall scheme, provide feedback with their mentors and sessions. The students talk in their groups while the ISII team members listened to their responses. The majority of the feedback the ISII team got from the students was positive.

The team asked the students what helped they got from their mentors. One of the students said: "*she helps with my writing and making clear what I need to do and I like taking part in the scheme, it helps my English*" (EMS1). Another student who was getting help with their Math said that the mentoring scheme helps them understand the subject better. There was one student though who stated that their "*mentor is very quiet, so sometimes it is not helpful*" (EMS3). This student believed that their sessions would be better if they communicated well and made a more personal bond with their mentors. The students were asked if they would recommend the session to a friend and general response to this question was a "yes". The students emphasised the fact that the scheme was "*very helpful, helps a lot with GSCE and makes the subject easier*" (EMS1,2,3). When the students were asked if there was anything to improve, again the students commented on the fact that the mentors could be a bit more talkative. As in the words of one student: "*they can be more talkative about other stuff not just sit there at the lesson, to get to know you better*" (EMS4).

From the second school, only three 3 students agreed took part in the focus group. Like the first focus group, the three students were mostly positive about their comments about their mentors. However, there were some comments towards the scheme and their mentors that were not as positive and highlighted what could be improved.

 "*My mentor helps me a lot comes every Wednesday and we recap what I found difficult during the week. He listens to the lessons as well. When we had a test, he made revisions with me which were very helpful*" (EMS2). Another said: "*Mine helps me see things better in the texts. Helps me with my general English. I feel like me and my mentor get along*" (EMS1). However, one of the students said they did not talk to their mentors and they commented that they did not think to have a mentor in the classroom was that useful: "*I got to pay attention to the class and I listen to my teacher. The mentor just sits there*" (EMS3). While one of the students enjoyed having a mentor and had positive feedback, another one seemed to think that their mentor was not helpful and thought they were quiet.

With this focus group, there were also some comments on the seating plans. The students sit with their mentors in their classrooms during the lessons. Some of the students did not find this approach useful. One of the students said: "*I do not like it [the mentor sitting next to them in the classroom]. If*

I sit with my friends we all talk to help each other but when I sit with my mentor I have no one to talk to" (EMS1).

The students could have a better experience if they did not feel like they had sat separately from their classmates. Sitting separately from the rest of the class with their mentors seemed to make some of the students feel that they are different from the other students. This could be taken into consideration for the next year's mentoring scheme. Moreover, the students who enjoyed the mentoring scheme and had positive comments often emphasised the fact that they got along with their mentors and it was important to them to have a bond with their mentor. Creating a bond seemed to increase the students' enjoyment of the mentoring sessions.

VIP University Residential, Northamptonshire

The VIP University Residential took place at the University of Northampton, Waterside Campus on 16th and 17th of July 2019. 80 students in total attended the two-day event. The event aimed to provide students with real-life university experience, teaching them about applying for university, accommodation, and what it feels like to be a university student. The students stayed in halls at the Waterside Campus.

The ISII team designed pre- and post-surveys, including qualitative and quantitative questions, and were present on both days to collect the surveys.   Figure 39 below indicates the breakdown of pre- and post-surveys.
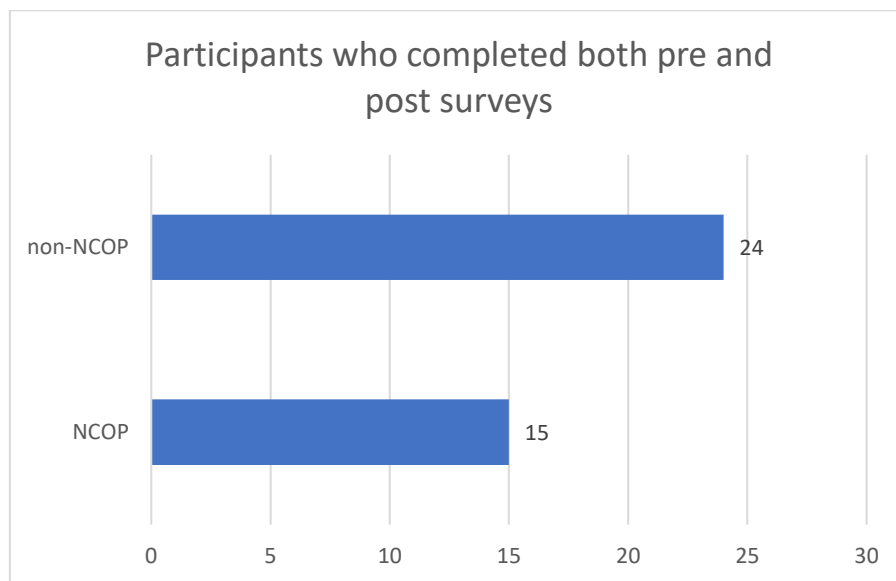
Figure 39: Number of participants who completed pre- and post-surveys

Figure 39 shows the number of students who completed both the pre- and post-surveys which could be matched. 37 surveys were unable to be matched (20 pre- and 17 post-surveys) as either student didn't fill in their names or other identifying details in to allow them to be confidently paired to another survey, or identified as either part of an NCOP ward or not. Another school who attended is not part of the NCOP programme and therefore students were not able to be identified as living in an NCOP criteria ward, and have therefore been excluded from the evaluation (n=9). Of the total attendance, the matched survey represents 60.93% of the students (excluding the non-NCOP school).

Upon arrival, whilst registering for the event the students were asked to complete the T1 survey. As part of this they were asked to what extent they agreed or disagreed with a selection of set statements; "I have a good understanding of university life", "I am aware of the range of university programmes available", "I have a good understanding of how to apply for student loans", "I get enough information about university tuition fees and living costs", "I am confident that I can achieve the grades I need to get into university or higher education", and "I am confident that I would fit in at university". With '1' representing 'Strongly agree' and 5 'Strongly Disagree', with an additional option of 'not sure', the NCOP student attending the event were more likely to disagree with the statements then their non-NCOP counterparts.
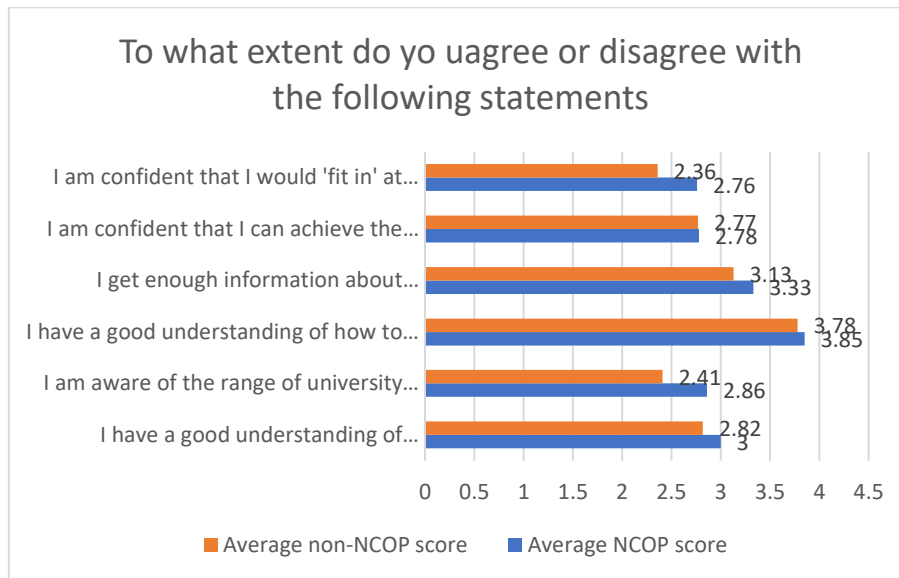
Figure 40: How far do you agree or disagree with the following statements (the higher the score, the

Although across the two cohorts both NCOP and non-NCOP students scored similarly as a group, NCOP students were more likely to strongly agree with "I am confident that I would 'fit in' at university" and "I get enough information about university tuition fees and living costs". Non-NCOP students were more likely to strongly agree with the statements "I am aware of the range of university programmes available" and "I have a good understanding of how to apply for student loans".

When we look at the qualitative responses from the surveys, the students overall had positive comments about the event. One student said: "*I enjoyed the hospitality of the staff they were very kind and helpful*" (VIPS1). Another said the event: "*has opened my eyes to different subjects in the same areas I was interested in*" (VIPS2). There were many comments about a speaker, Davide Hyers, who talked about memory and self-confidence. The students reported that they found his speech useful. As one student stated: I enjoyed the speech by David Hyers as I found it useful to learn to believe in yourself" (VIPS3). A Similar comment made by another student: "*I enjoyed David Hyers' session about memory and assumptions*" (VIPS4).

Post 16 Residential, Leicestershire

The Post 16 Residential summer school was hosted by University of Leicester. Places were limited at 100/week and students had to answer several questions to determine their eligibility for the programme. During the week students had the opportunity to take part in academic sessions, which included lectures and seminars. This introduced them to the style of teaching at university. Students also had the opportunity to complete a Colour Works personality test, designed to help them gain more self-awareness of their approaches to work and stress. Social activities included a guided tour

of King Power Stadium, a quiz, movie night and an end of summer school disco. Mentors were present at all times. As current students at University of Leicester, the mentor team was vital in sharing information and experience of life at university and giving an honest account of the challenges and opportunities that HE presents.

70 students who attended the event completed the pre-event survey, with 12 being identified from an NCOP ward (17.14%), with a further 12 (17.14%) not able to be categorised. 64 students completed the post survey with 10 (15.62%) being NCOP and a further 9 (14.06%) not categorised.

As part of the pre-event survey the students were asked for their reasons for attending the residential. NCOP students were more likely to attend the residential to build their skill set compared to their non-NCOP counterparts, for example, *"Building on my personal statement"* (RS1). The non-NCOP cohort, however, were much more likely to attend the event to develop their knowledge of specific subjects, *"Experience in relation to medicine"* (RS2), *"Opportunity to learn more about medicine course"* (SR3), *"Learning Economics"* (RS4). Both cohorts had similar percentages of students that valued the personal experience of attending such an event (*"Experience of being independent"* (RS5)*; "Meeting new people"* (RS6) and those who sought an experience of Higher Education (*"The idea of experiencing university life"* (RS7); *"Being able to get a taste of how Leicester Uni is all about"* (RS8).

When asked about any concerns they with attending university, attainment was the most prevalent concern amongst the NCOP cohort *"Failing my classes"* (SR8); *"Failing my modules"* (RS10). These concerns were also mentioned by the non-NCOP cohort, however, Isolation and specific course related fears where more common: *"away from family and friends"* (RS11); *"making friends"* (RS12); *"Course is boring"* (RS4); *"Adjusting to the new teaching style"* (RS14).

As part of the post-event survey, they students were asked if any of the concerns they had prior to the residential had not been answered. No NCOP student answered, suggesting that their concerns had been addressed, 5 of the non-NCOP cohort had further suggestions, ranging from the residential being a longer event, to more specific guidance: "*Needs to be longer"* (RS15); *"When do I apply for accommodation?"* (RS16); *"About application skills"* (RS17).

Post-event a second survey was completed with the students to measure the impact the residential had on them, and their attitudes toward higher education. The NCOP students were positive about the activity, with only one statement (*"The academic sessions were educational and engaging")* receiving negative feedback. The non-NCOP students were more likely to disagree with the statements, but overall positive about the activity.
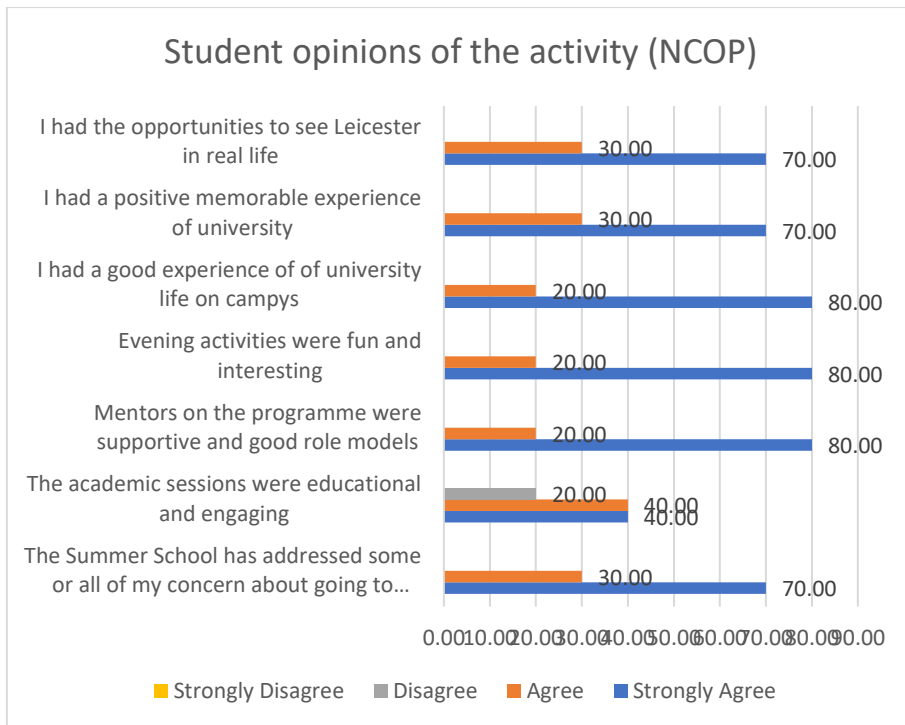
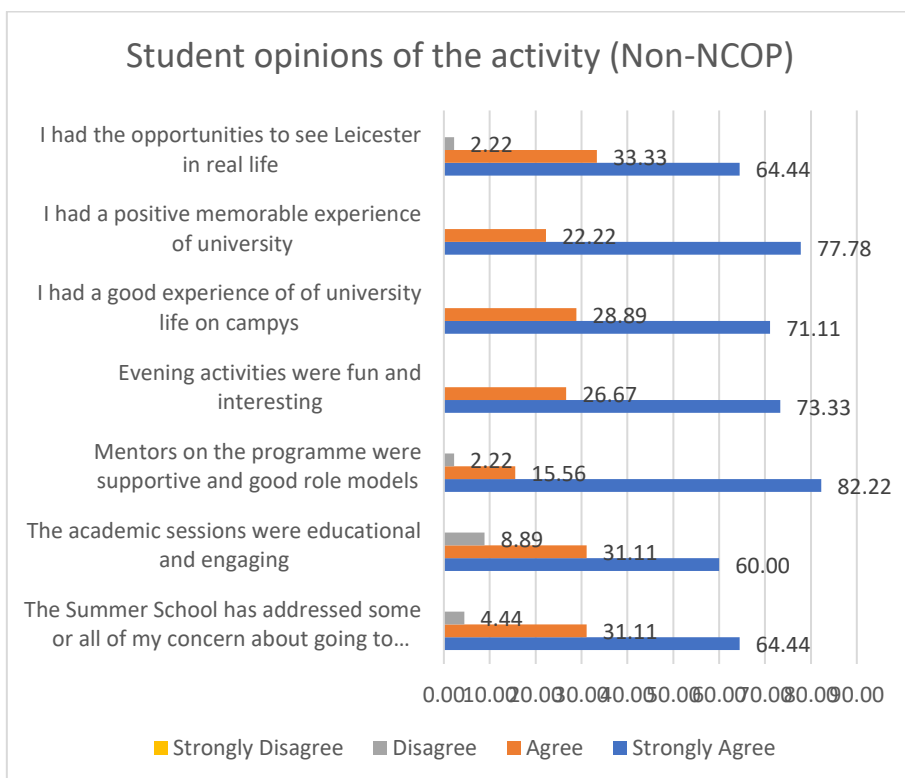*Figure 41: Graph showing NCOP opinions of the activity (Post-Event)*

Figure 42: Graph showing non-NCOP opinions of the activity (Post-Event)

Much like their impressions of the event, both cohorts were positive regarding their knowledge of university. Each NCOP student surveyed answered that they intended to go to university, and either strongly agreed or agreed, with each statement regarding their understanding of higher education. The non-NCOP cohort was similar in their responses, with only one student advising they had no intention of going to university.
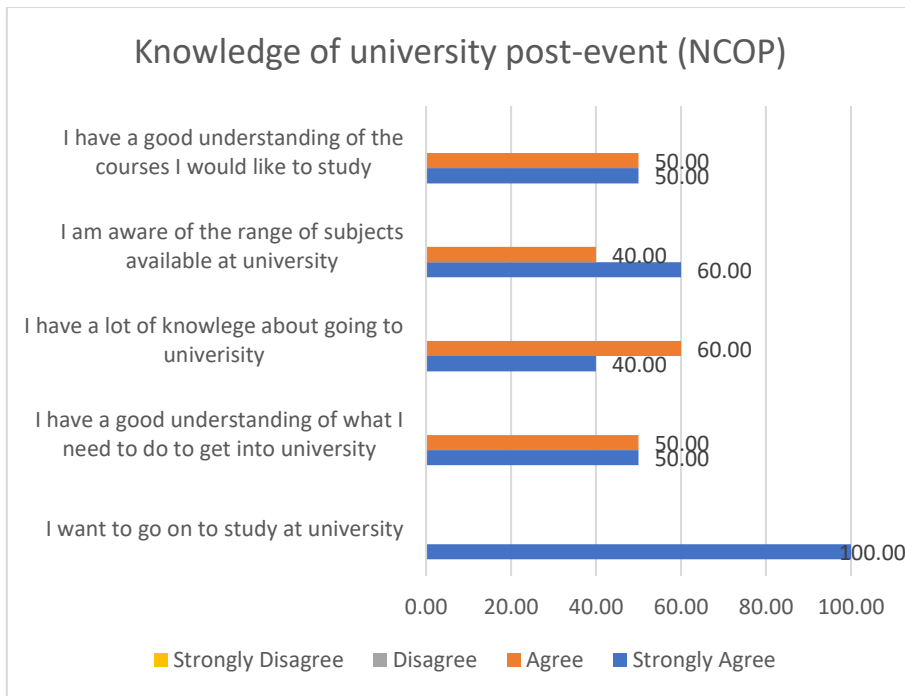
Figure 43: NCOP knowledge of university (Post-Event)
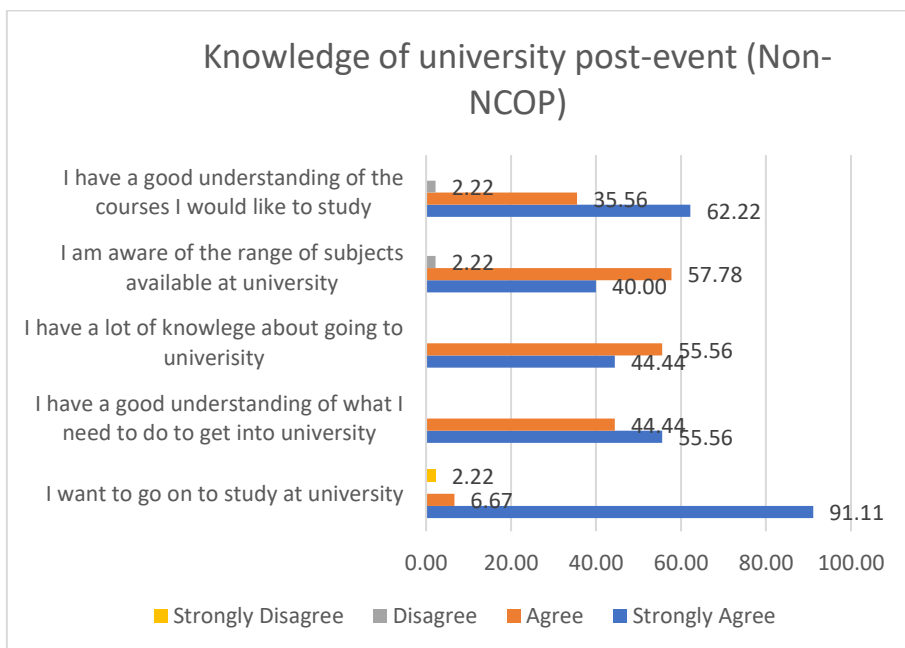
Figure 44: Non-NCOP knowledge of university (Post-Event)

Car Crash Careers Day

The 2019 Car Crash Careers Day took place on 12th of June at the University of Northampton's Waterside Campus. As part of the evaluation process, the ISII team collected data from students, and teachers who attended the event with their students. The pre- and the post-surveys (Appendix N) were collected from schools with the help of the school coordinators. However, the pre- and post were not completed by the same number of students. 93 students completed the pre- surveys

whereas only 66 students completed the post-survey. 46 surveys matched, and the figures below based on these 46 surveys; 39 of them were NCOP and 7 were non-NCOP students. The rest of the analysis is based on feedback from the overall number of 159 students.

Students

The student surveys included both qualitative and quantitative questions. The students were asked if the workshop they attended affected their knowledge in careers, and most of the students gave positive responses to this question. One student said: "*Yes. They have shown me more reasons why I should attend university*" (CCCS1). Another said: "*Yes-, it showed me what people in different careers do*" (CCCS2). Similar responses were given by other students such as: "*Yes it affected knowledge, I know now have a higher understanding of what careers to have*" (CCCS3), and, "*Yes, helped me learn about different courses at university*" (CCCS4). When students were asked if there was anything they particularly enjoyed, the majority of the students mentioned the fact that there were a variety of subjects introduced on the day which was helpful. As one student noted: "*It was a good opportunity and opened my eyes to new career options*" (CCCS5). Many similar comments were made by other students such as: "*I enjoyed everything because it thought me more about different things you can do in the future*". "*I enjoyed the activities and how important things were made into a more enjoyable and fun activity*" (CCCS6), and "*The helpers were nice and we had a different range of activities*" (CCCS7).

The quantitative questions focused on the students' views on going to university. Both in pre- and post-surveys they were asked if they were planning to university in future. Figure 45 below indicates NCOP vs non-NCOP students' responses to this question in the pre- surveys.
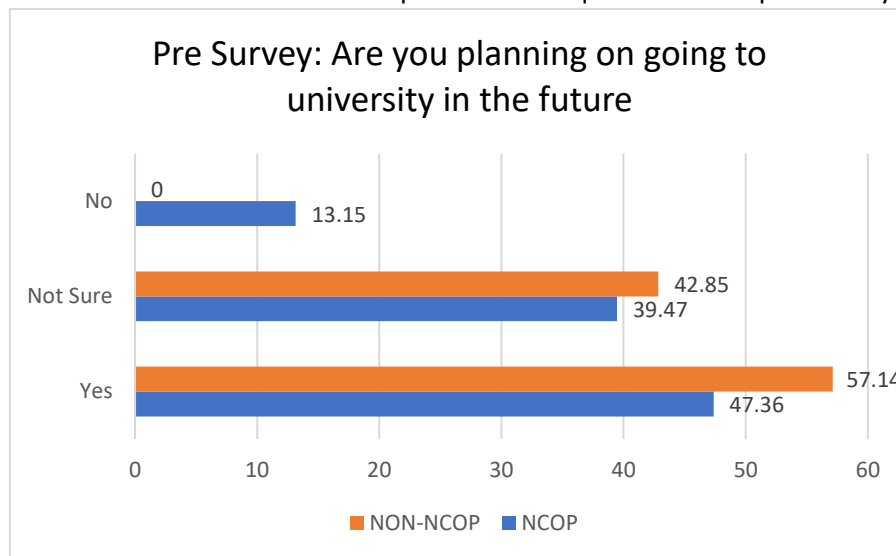
Figure45: Are you planning on going to university in the future (Pre- surveys)

57% of non-NCOP students said "yes" to going to university in the future whereas 47% of NCOP students said yes. When the same question was asked after the activity, there has been an increase

in the number of students who said "yes" to going to university in the future.

Post Survey: Are you planning on going to university in the future?

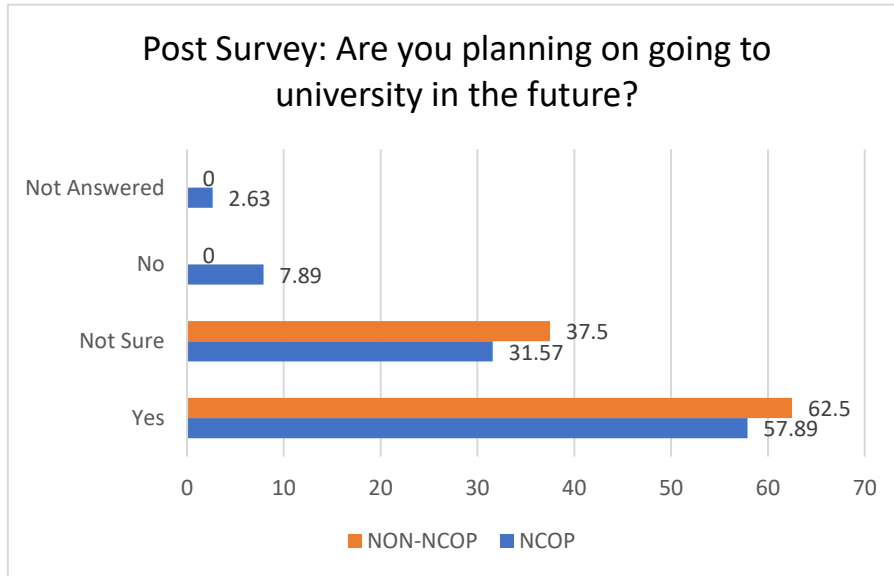| Response	Non-NCOP	NCOP
Not Answered	0	2.63
No	0	7.89
Not Sure	37.5	31.57
Yes	62.5	57.89

■ NON-NCOP ■ NCOP

Figure46: Are you planning on going to university in the future? (Post surveys)

Figure 46 above indicates that after attending the event, there has been a 10% increase in the number of non-NCOP students who said "yes" to going to university. Similarly, the number of NCOP students who said "yes" to going to university increased from 47% to nearly 58 %. This could be interpreted as the event motivated these students to think about different career opportunities and introduce them to the different subject at the University.

The next figure looks at the question "What are you hoping to achieve by attending Car Crash Careers Day". This question was asked in pre-survey and analysed to see what the students' expectations were before the event.   Figure 47below indicates that before attending the event 57% of the non-NCOP students were hoping "to learn about different career options", 14% of the non-NCOP students picked from the rest of the options which were "to have fun", "to learn about different subjects" and "I don't know".
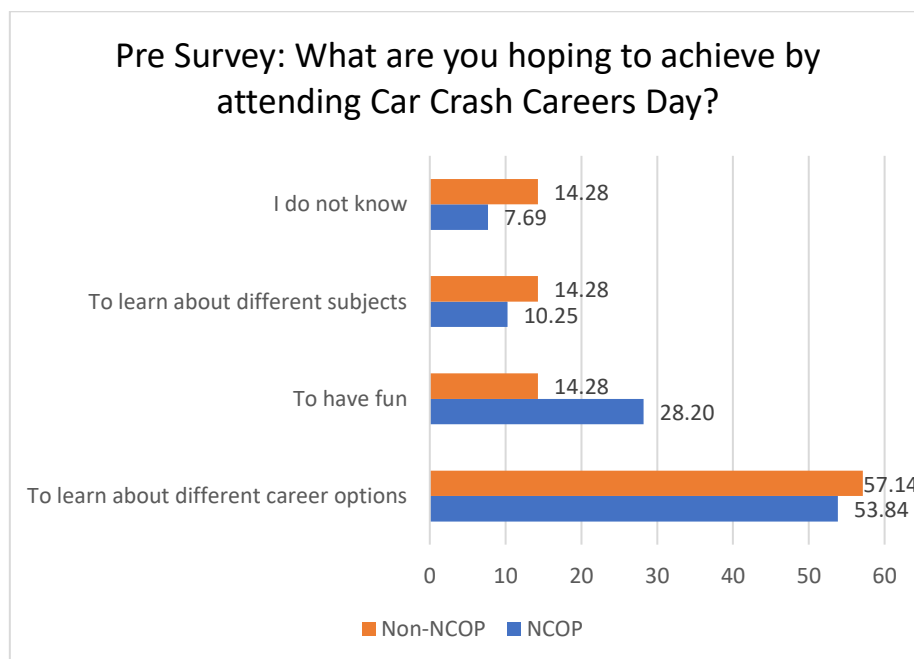
Pre Survey: What are you hoping to achieve by attending Car Crash Careers Day?

Response	Non-NCOP	NCOP
I do not know	14.28	7.69
To learn about different subjects	14.28	10.25
To have fun	14.28	28.20
To learn about different career options	57.14	53.84

■ Non-NCOP ■ NCOP

After the event, the same question was asked with a follow-up question of "has the day met your expectations". As can be seen from Figure 48 below, 83.33% of the non-NCOP and 56.41% of NCOP students said they were hoping to learn about different career options.
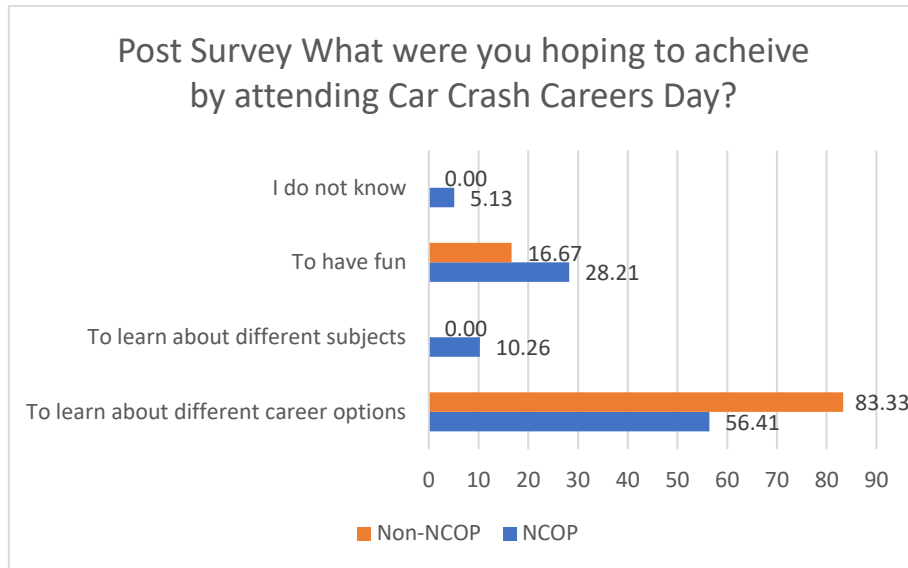
Figure48: What were you hoping to achieve by attending Car Crash Careers Day (post surveys)

The qualitative data supported the fact that most of the students came to learn about different career options, and 64 students out of 66 stated in the post-survey that the event met their expectations. The students provided similar responses to the question if the day met their expectations. One student said: "*I thought I would learn about different career options and I did*" (CCCS60). Another said: "*It exceeded my expectations, and I learnt about different subjects*" (CCCS58). According to the survey results, the students overall enjoyed the event and found that it expanded their knowledge regarding different fields of study.

The next section looks at the teachers' feedback who attended the Car Crash Careers Day with their students.

Teachers

The teachers were asked what impact they were hoping the event would have on their students who attended the event (Survey is available at Appendix N). All of them (100%) stated that they hoped that the event would broaden their students' horizons, as well as encourage them to consider different fields of study (93.3%).
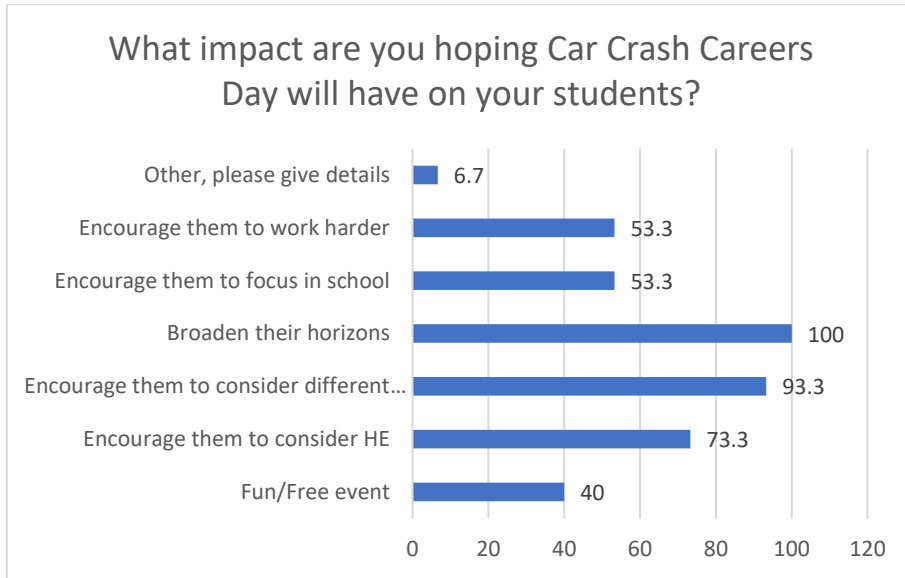
Figure49: What impact are you hoping Car Crash Careers Day will have on your students?

The majority of the teachers either agreed, or strongly agreed with the statement that the event would help their students consider different career options (86.6%), with the same percentage feeling it would also introduce them to new fields of study. The same percentage, again, felt that experience of the day would encourage students into Higher Education.
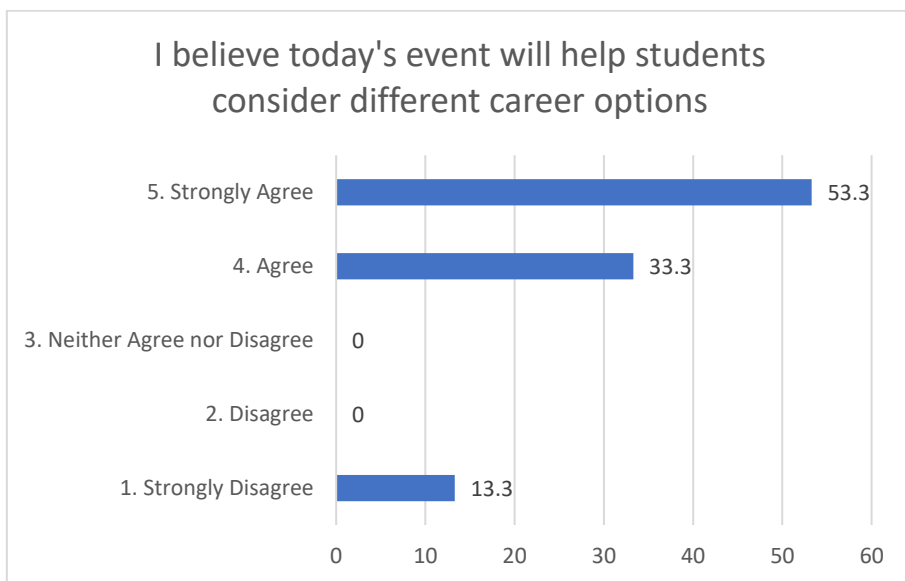
Figure 50: I believe today's event will help students consider different career options
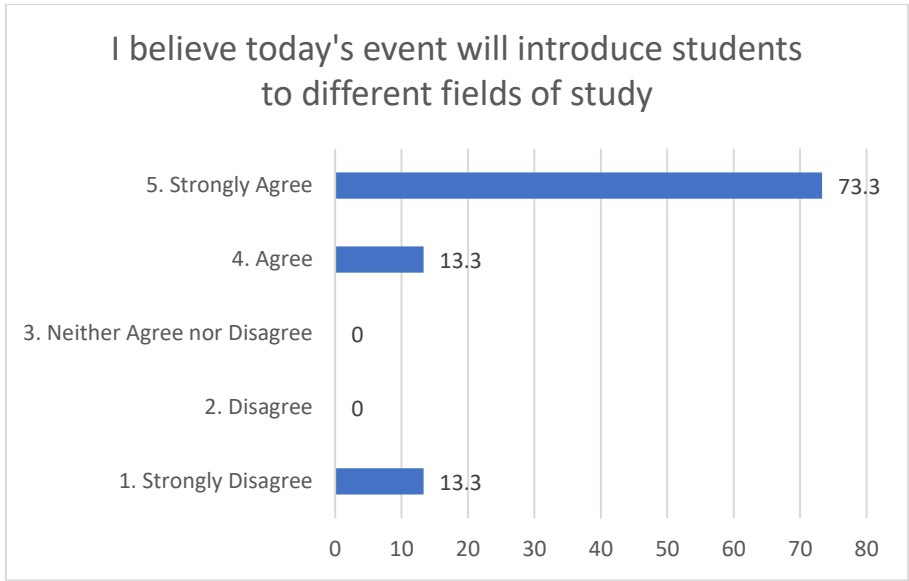
Figure 51*: I believe today's event will introduce students to different fields of study*
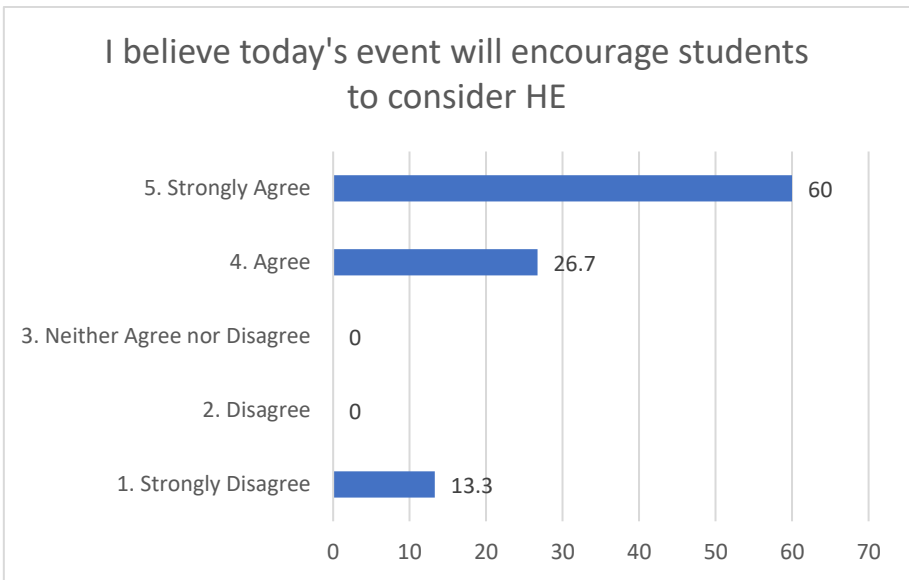
Figure 52: I believe today's event will encourage students to consider HE
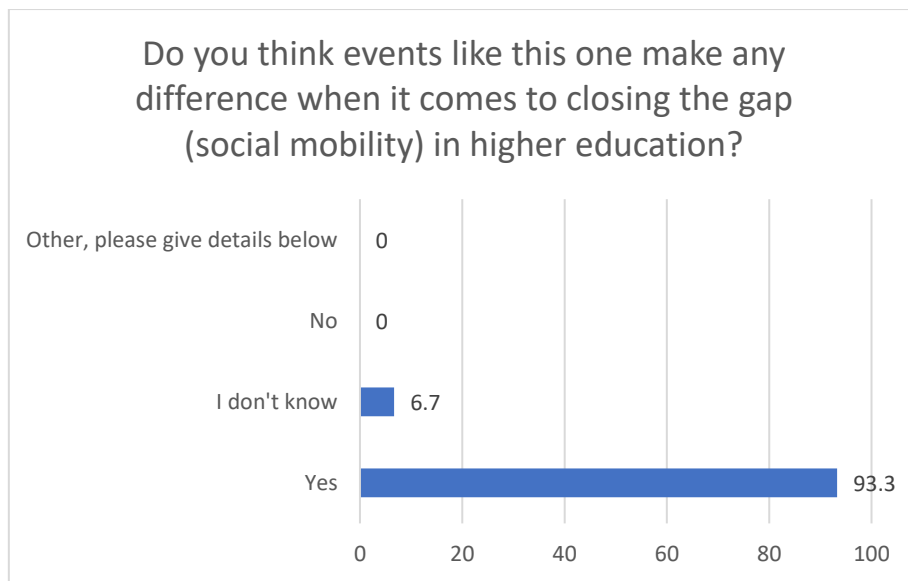
Figure 53: Do you think events like this one make any difference when it comes to closing the gap (social mobility) in Higher Education?

(above) 93.3% of the teachers surveyed answered "yes" to the question about events such as Car Crash Careers Day, making a difference when it comes to closing the social mobility gap in HE. The teacher who stated they didn't know if it would make a difference, clarified their position adding that the events could make a difference *"in theory but students main influences are parents and the social groups they are in. A lifetime of belief about HE can't be undone in one day"* (CCCT2). This is an important comment as it takes into consideration the students entire environment and the influences they have outside of their classes. Another teacher stated that these events are useful *"especially when children come from different backgrounds"* (CCCT4). This sentiment was further built upon by the following, open text question "Do you think Car Crash Careers Day has more of an impact on some students than others? (Considering age, gender, ethnicity, socio-economic situation).

13 of the 14 teachers (92.85%) who replied agreed that it did have a greater impact on the students meeting the NCOP criteria. One of the teachers said: *"Yes, depending on the family background of the students and their own experience with higher education pathways. This is an opportunity that can help lower-income family students consider higher education roots"* (CCCT6). Another teacher answered: *"Yes, those with low aspirations need events likes these to be encouraged"* (CCCT5). One of the teachers also reported some feedback that could be considered next time running this event. She/he said that: *"some of the activities would be more impactful if there weren't gender stereotypes from the presenters, and 3 activities so far have all been male led"* (CCCT10). Another teacher made another important point: *"Students that have parents who support and understand applying to and going to university are more likely to access HE"* (CCCT12).

The survey questioned the teachers' opinions on the obstacles faced by the students, asking them what they thought were the biggest barrier that halts them attended HE. Of the 14 responses, 6 (42.85%) mentioned in their answers the students' families. For example, *"Parents attitudes"* (CCCT5), *"Parental support"* (CCCT7), *"Family members not been to university"* (CCCT1). 5 of them (35.71%) believed there were financial concerns: *"Social economic background"* (CCCT2), *"Finances, lack of knowledge"* (CCCT6), *"Finance fear of debt"* (CCCT10), with another 5 of them (42.85%) raising concerns with the students' aspirations: *"Aspirations and parental support"* (CCCT3), *"Aspirations, low expectations"* (T9), *"Low aspirations/a lack of awareness of the options available"* (CCCT11).

Regarding the event itself, each of the teachers surveyed would recommend the event to a colleague (100%). The feedback was very positive, with teachers' writing "*Yes, this is by far the best event I have been to in some time*" (CCCT7), "*Yes think all children should have this opportunity*" (CCCT15) and, "*yes – very engaging for students*" (CCCT2). The only negative feedback came from a teacher who, although would recommend the event to a colleague, suggested that *"the open outdoor theatre show needed to be better set up as students couldn't see from the back, causing them to disengage"* (CCCT9).

When asked "In what way would you like this event to be followed up in your school", of the 15 responses 9 (60%) answered that follow up assemblies or visits would build on the students' experiences of the day *"visits from some of the contributors to expand upon career routes"* (CCCT14), "*A Visit. Further courses*" (CCCT12), "*Lecturers speaking to students"* (CCCT6). Two teachers also suggested creating feedback assemblies, where the students themselves would feedback to their peers about their experiences "*an assembly with students discussing their experience*" (CCCT2), "*Students to feedback their experiences to others who did not make it*" (CCCT8). When asked if Car Crash Careers Day could be turned into a series of interventions and how would they like to see it happen within the schools, the teachers provided a range of feedback. 4 of the teachers (26.66%) suggested keeping the workshop basis of the day: "*Possible a carousel event*" (CCCT14), "*Further Workshops*" (CCCT3). 3 of the teachers (20%) were concerned about the logistics of planning it around the schools' timetable stating: "A specific day that is timetabled into the curriculum" (CCCT1) and, "*Useful for off timetable days*" (CCCT4), though each of the respondents was positive toward the idea.

PET-Xi

PET-Xi training offered revision classes for Year 11 students in eleven schools in Northamptonshire. PET-Xi aims to deliver high-energy training that is designed to help students to achieve their target grades. ISII team conducted a focus group with a school who agreed to be part of the evaluation process. The same school also completed a qualitative survey to get students' feedback on the training.

Survey

The majority of the students stated that PET-Xi training improved their Maths skills. The students said the tutors went into "*details about how to answer the questions*" (PETS1), and they simplify the formulas. One student said: "*I know now how to do specific things that I did not know how to do before"* (PETS2). There was a common theme among the answers the students gave which was that the tutors helped the students "*learn easier methods to work things out*" (PETS3).

Focus Group

6 students from one school took part in the focus group interview. It was a common theme among the students that the PET-Xi training helped them with their exams as well as with their general Maths skills. For instance, one student said: "*I found it useful because it helped me found different methods of how to solve different equations and stuff, so helped me that way*" (PETS2). Another student commented on the fact that it was useful to have the session just before their exams: "*It was good, some stuff was new but a lot of was recapping before the exam*" (PETS1). One of the students mentioned that the training made them feel more confident about Maths: "*It made me more confident of Maths, I did not like Maths before but the training helped me feel more comfortable about it*" (PETS3). A similar comment made by another student: "*It builds my confidence, I went in knowing stuff but did not know if they were correct. It helped me build my confidence*" (PETS2). One student also mentioned that it is a relief to know that they could easily get help from the trainers: "*It is good to know that I could go into a room and I could get support if I need to*" (S1). "*If you did it wrong, they showed you how to do it rather than saying you are wrong*" (PETS4).

Overall, the students took part in our focus group provided positive feedback. The only improvement they suggested was that the training went too quickly since it was only a day activity. They all agreed on the fact that it would have been better to have longer training.

VIP EASTER STRESS RELEASE

The day was split across 4 sections, a campus tour of the university, an Exams and Well Being workshop with the Student Union, a "Making Choices" Presentation and "Mindfulness Made Simple - A Guide to Combatting Stress".

17 students completed both pre- and post-surveys for the VIP Easter Stress Release event. NCOP students made up 41.18% of the cohort, with no male NCOP students attending the event.
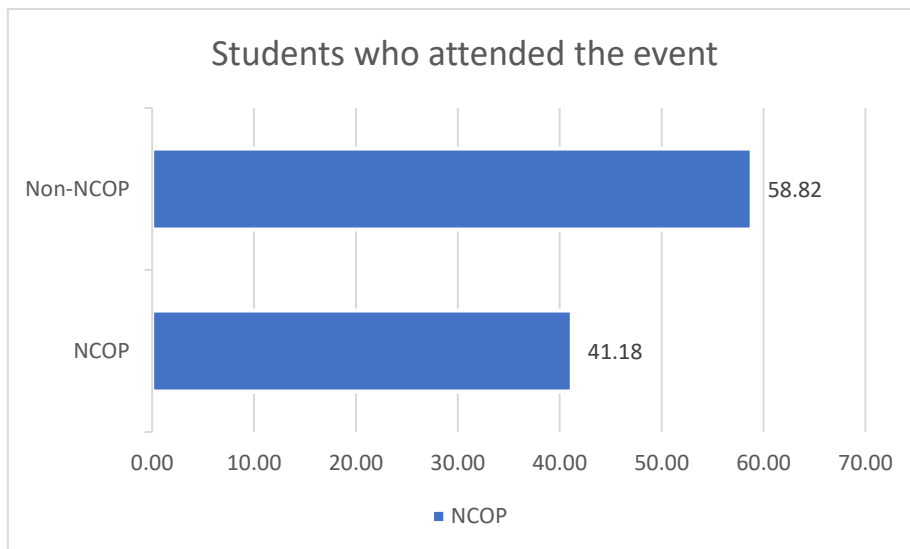
Figure 54: NCOP Students attending the event
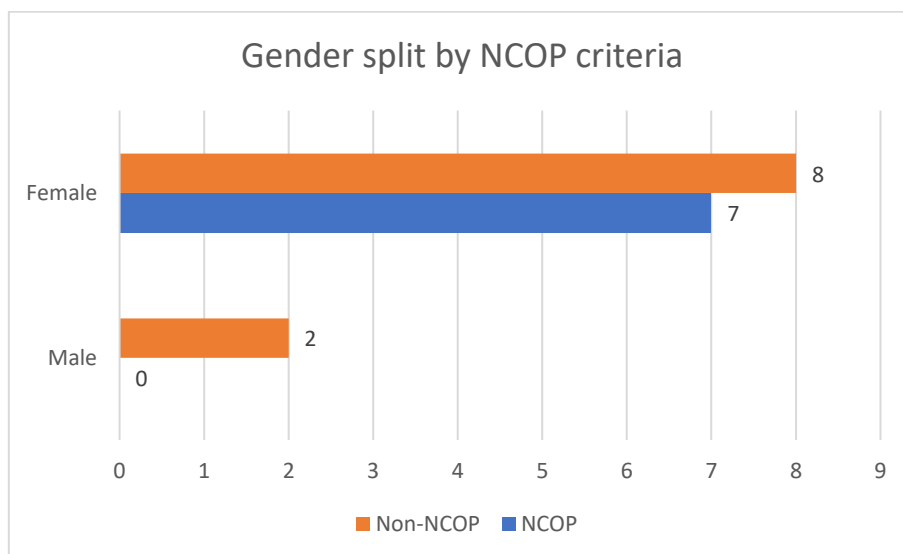
Figure55: Gender split by NCOP criteria

50

The reasons for attending the event were consistent across both NCOP and non-NCOP, with 57.14% of the NCOP and 60% of the non-NCOP, saying they attended the event to better cope with pressure ("I hope it will show me how to cope better with pressure"). NCOP students were more likely to have selected the answer "*I hope it will help me do better in my exams*" (28.57% to the non-NCOP 20%), as opposed to "*I hope it will make me feel less stressed*" which saw the NCOP responses drop to 14.29%.
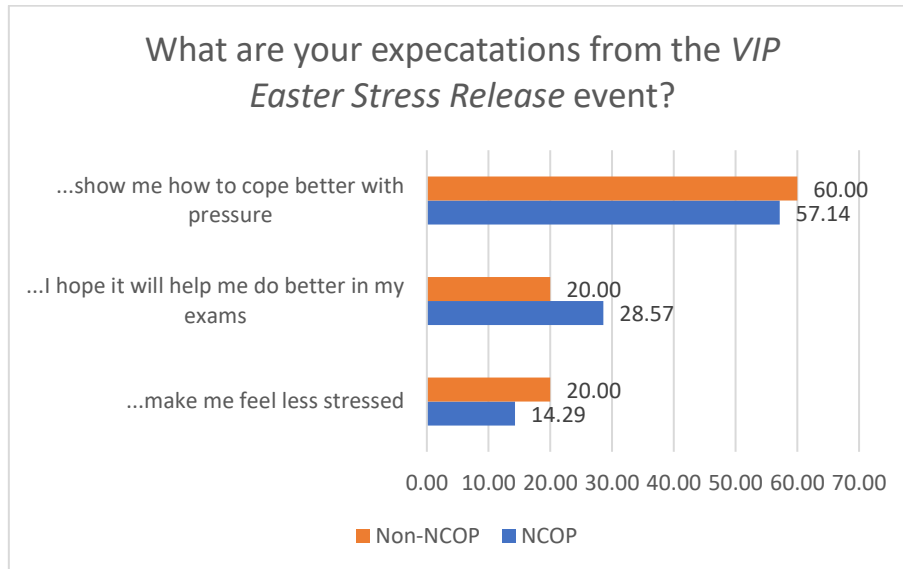
Figure 56: What are your expectations from the event

Prior to the event, students were asked about their thoughts and feelings over the previous two weeks. The evaluation focused on the students who had either given specific negative answers (None of the time, rarely) prior to the event and measured the impact the session had on them.

When asked if they had felt optimistic, thinking clearly or feeling close to people, the NCOP students were more likely to have given a negative response, with 28.57% struggling with optimism and thinking clearly and 42.85% not feeling close to people. When it comes to feeling relaxed, dealing with problems and feeling useful, however, no NCOP student offer negative responses, despite, 30% of the non-NCOP cohort indicated a struggle to relax, and 10% didn't feel useful or didn't feel they were dealing with problems well.
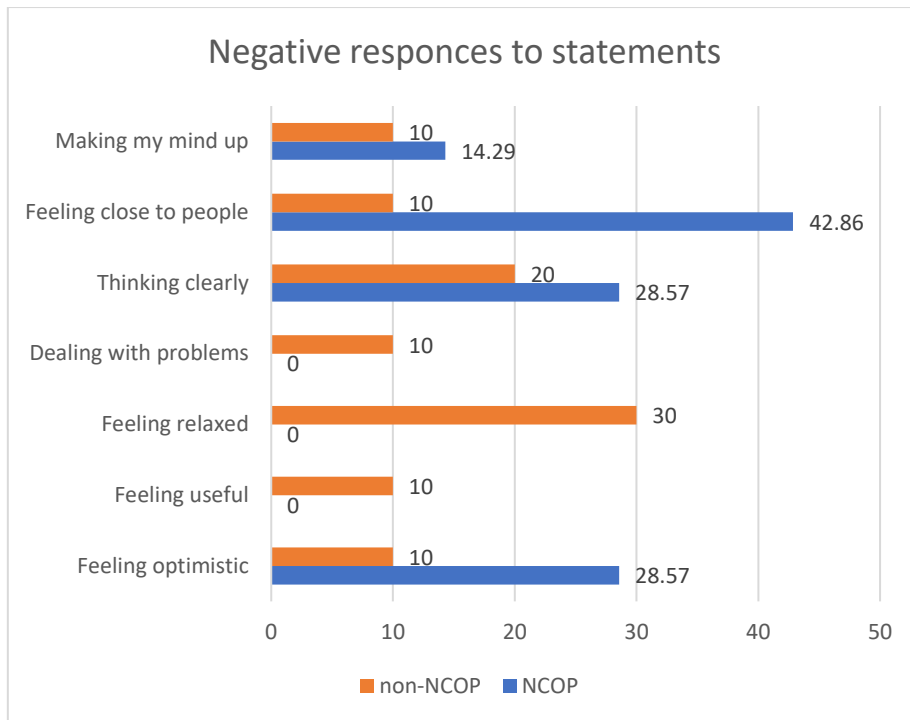
Figure 57: Negative responses

For the NCOP students, the day was impactful on how they felt about the statements, with the exception of "Feeling Opitimistic", the negative feelings toward "Feeling Close to others" and "Thinking Clearly" improved. For the Non-NCOP students the feeback was more balanced with it being split 50/50 on whether there was a score improvement across the offered statements. Indicating the session was more beneficial towards NCOP students than non-NCOP.
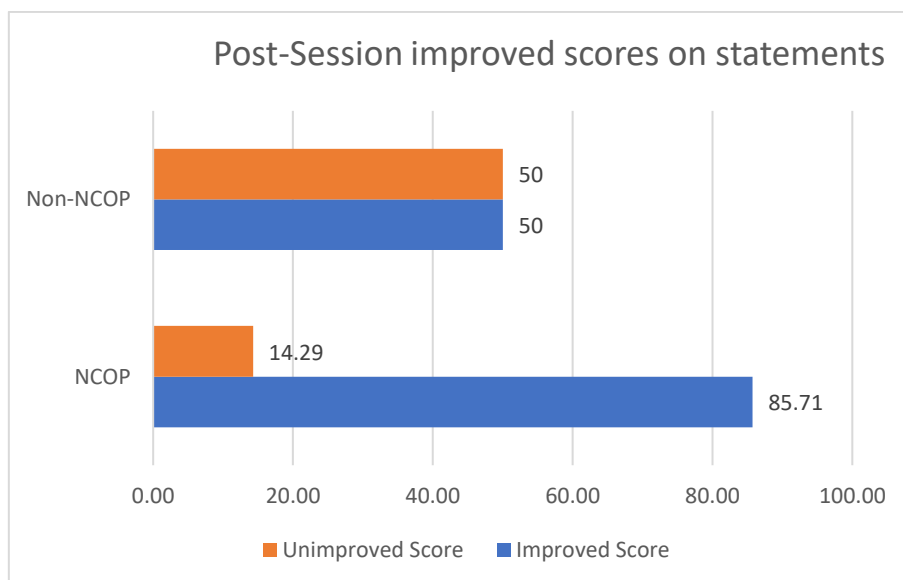

Figure58: Post Session surveys

The day also gave the student a greater understanding of mindfulness with all but 2 of the students saying their understanding of the term had changed from the start of the day, with 15 of the 17 students being able to offer a definition of the term, for example, "To have a clear meaning of how to

feel in your body and mind" and "Relaxing and being one with yourself". Prior to the event, only 6 offered a definition, 2 of which maintained the same interpretation of mindfulness in the post survey, saying their understanding of the term had not changed.

The students were asked whether they agreed on disagreed on a five-point scale (1: being Strongly Disagree, and 5: being Strongly Agree) if certain places or people had useful information on Mental Health. Their opinions changed across the day, with each of the categories, "School", "GP", "Family" and "Peers" seeing increased positive scores. The exception to this is "Social Media" which dropped for NCOP and stayed level for non-NCOP students. For both the NCOP and non-NCOP cohort, getting information from Peers saw the largest increase in score.
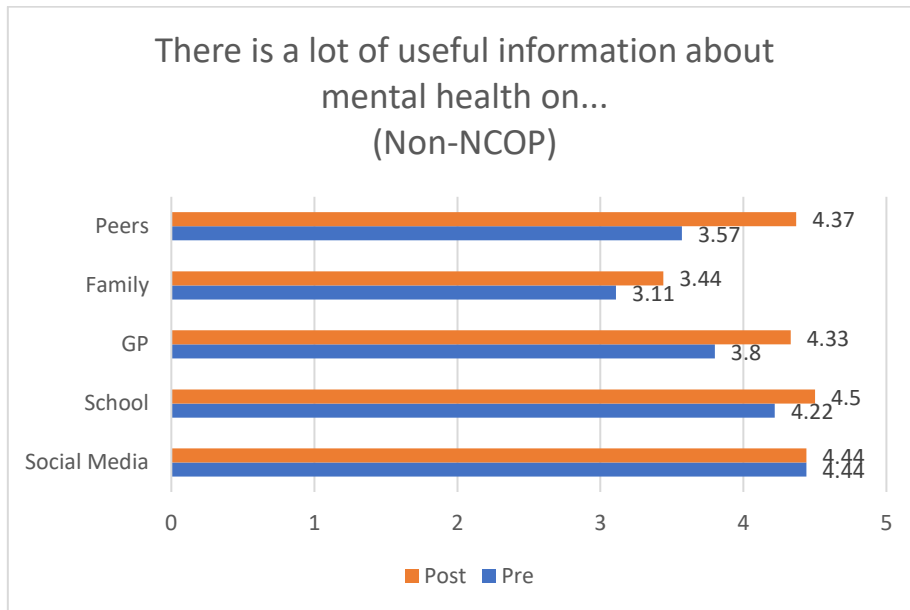
Figure59: Non-NCOP responses
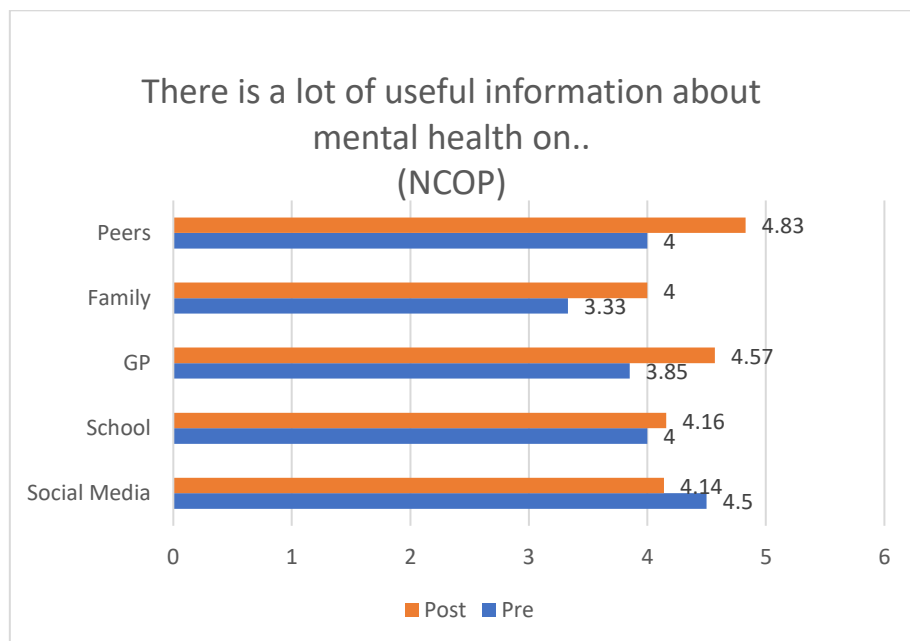
Figure60: NCOP responses

The Campus tour and the Exams workshop had more of an impact on the NCOP students than the non-NCOP cohort, with average scores of 3.71 on both, compared to 3.1 and 3 respectively. For both groups the Mindfulness Workshop received the most positive feedback, and average of 4.71 for the NCOP students and 4.5 for non-NCOP. The third workshops, "Making Changes" was the only workshop which non-NCOP students rated higher than NCOP.
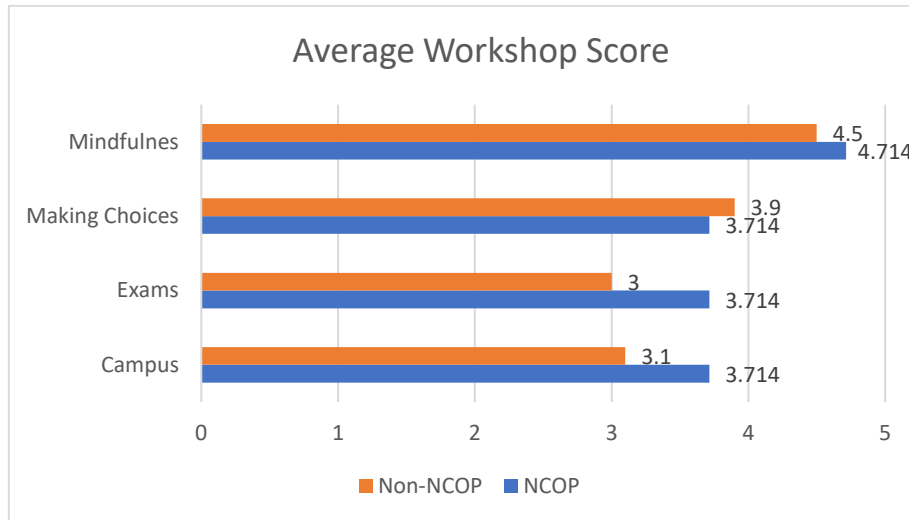

Figure61: Average Workshop Score for the event

Year 10 Holiday Club

Year 10 Holiday Club took place between 28th to 31st of May 2019, during the May half-term, at Loughborough University.

The ISII team designed pre- and post-surveys for the students who took part in the event. We collected 60 pre (29 male and 31 female) and 45 post surveys (17 male 27 female).

The qualitative responses from the survey were mainly positive. The students reported that they found the event useful since they learnt about university costs, a variety of career opportunities, and how to apply to student loans so that they could apply to attend a university. When the students asked if the event met their expectations one student said: "*Yes, because I have found out lots about costs, future careers and questions answered by people who go to university*" (HCS20). Another student said: "*It has surpassed my expectations as the amount of fun I had was greater than expected whilst doing the project*" (HCS21). Other students also reported that they learnt "*a lot about different things to do with the university*" (HCS22) and learnt "*new skills like creative writing, advertising and about university*" (HCS23). One of the students even wrote down that now that they attended Year 10 Holiday Club they "*have made my [their] mind to attend university*" (HCS19).

The students all commented on the overall event and emphasised the fact that they had more fun they expected and they enjoyed working in teams and meeting new people. As one student puts: "*I had fun in our group and other groups, I made friends*" (HCS24). Another student also said the event was fun because they worked together with people they didn't know (HCS25). One interesting and important finding was that when the students were asked what would stop them from going to university, most of the students mentioned that 'the distance' is their biggest issue that stops them going to university since they would like to stay close to their families. One possible solution to this

issue could be that these students engage and learn more about their local universities so that they would not need to move away from their families to go to university.

The quantitative part of the survey showed mixed responses from the students. Figure 62 below represents the percentage of positive answers given to set statements, both pre- and post-event.
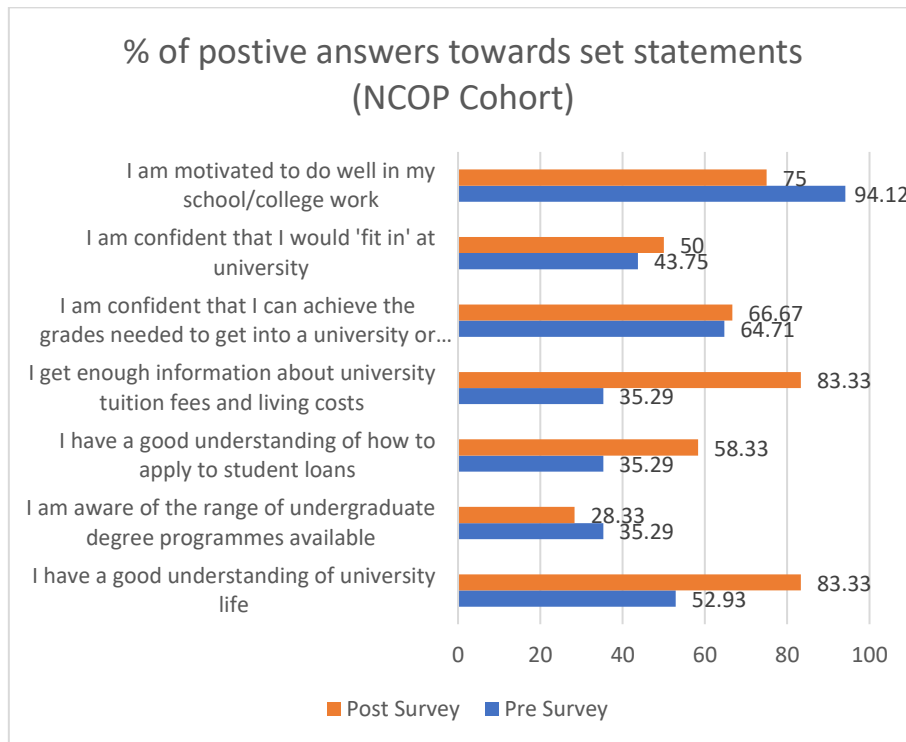

Figure 62: Percentage of positive answers towards set statements (NCOP Cohort)

The NCOP cohort saw increases in all but one of the categories where there was a decline ("I am motivated to do well in my school/college work"). "I am confident that I can achieve the grades needed to get into university or a higher education college" only saw a slight increase, as did "I am confident that I would "Fit in" at University". The largest increase in students giving positive answers was toward the statement "I get enough information about university tuition fees and living costs" with an additional 48% of the cohort giving positive answers following the event.
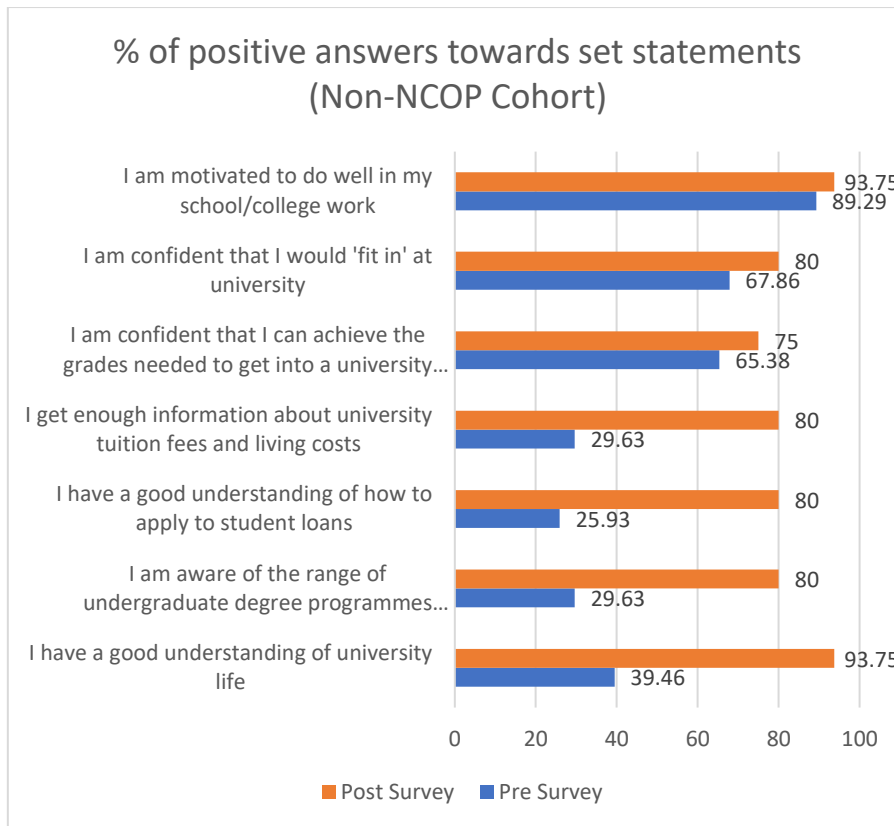
Figure63: Percentage of positive answers towards set statements (NCOP Cohort)

The above figure looks at the positive answers toward set statements both pre- and post-event with the non-NCOP cohort. The first three statements saw large increases post-event, with between 93.75% and 80% of the non-NCOP cohort having positive reactions to the statements compared to between 38.46% and 25.93% before the event. The majority of the non-NCOP cohort gave the statements "I am confident that I can achieve the grades needed to get into university or a higher education college", "I am confident that I would "fit in" at University", and "I am motivated to do well in my school/college work" positive answers, and post-event these number increased further.
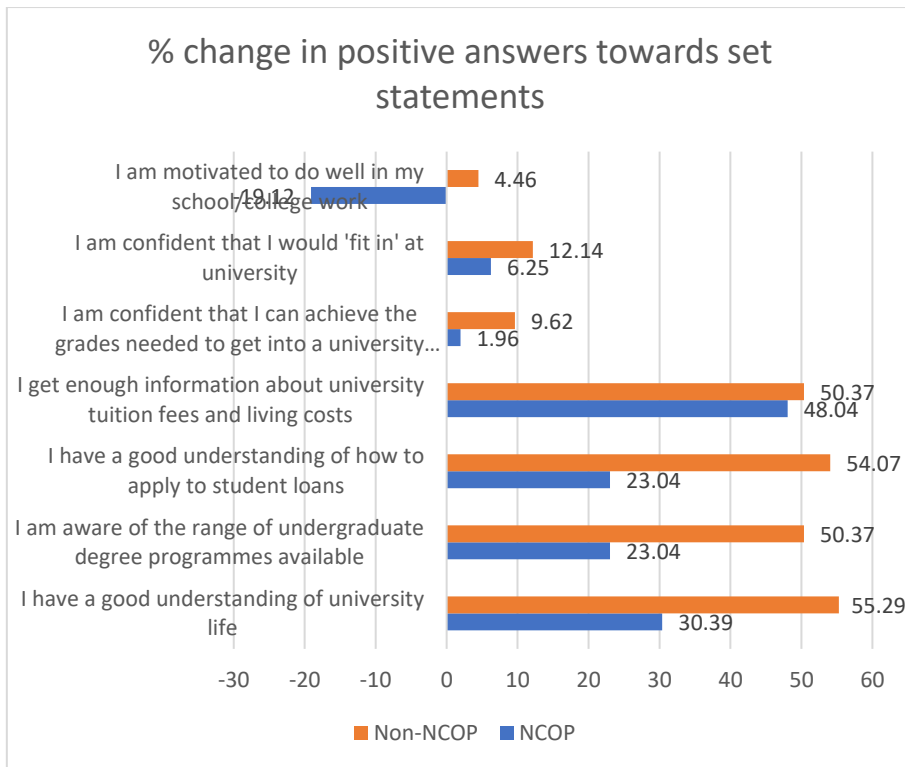
Figure64: Percentage change in positive answers towards set statements

Figure64 represents the percentage increase in student's positive answers towards a selection of statements. For the first four statements the non-NCOP cohort saw an additional 50% give a positive response to the statements after experiencing the Year 10 Holiday Club, the following statements already had a high percentage giving positive answers, however, they also saw a slight increase. The only reduction in positive responses came from the NCOP students when responding to "I am motivated to do well in my school/college work" which saw a 19.12% decrease.
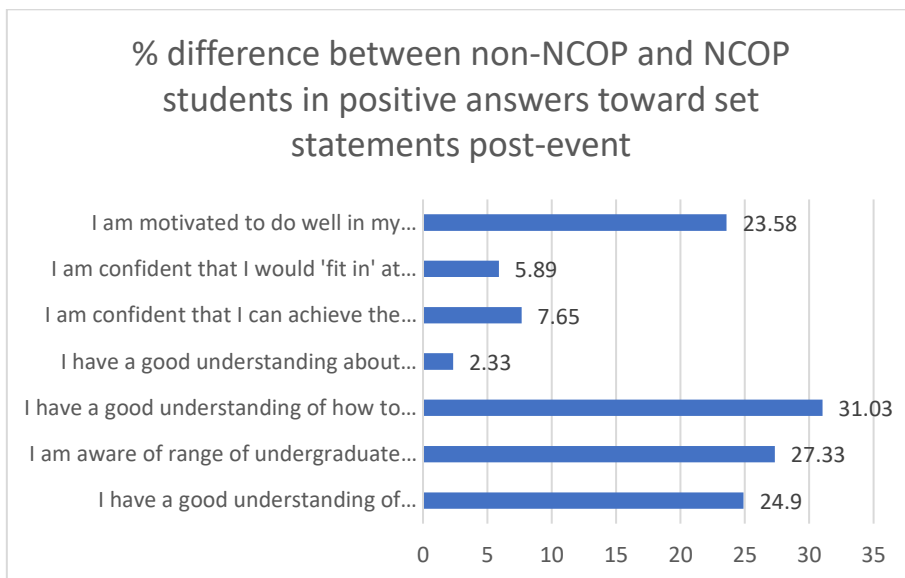
Figure65: Percentage between non-NCOP and NCOP students in positive answers to set statements (post surveys
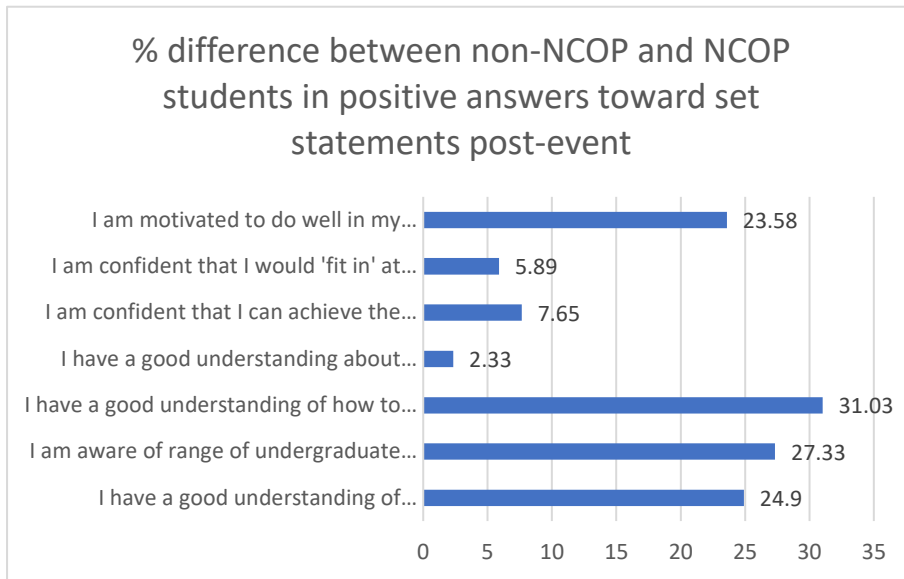
To add further clarification to Figure64,

% difference between non-NCOP and NCOP students in positive answers toward set statements post-event

Statement	Value
I am motivated to do well in my…	23.58
I am confident that I would 'fit in' at…	5.89
I am confident that I can achieve the…	7.65
I have a good understanding about…	2.33
I have a good understanding of how to…	31.03
I am aware of range of undergraduate…	27.33
I have a good understanding of…	24.9

Figure65 shows the percentage gap between non-NCOP and NCOP regarding positive answers to the set statements. "I have a good understanding of university life", "I am aware of the range of undergraduate degree programmes available", "I have a good understanding of how to apply to student loans" all saw larger gaps between the two cohorts, "I am motivated to do well in my school/college work" also has a large gap, however, unlike the first three statements the gap is based on the decline of the NCOP cohorts' positive statements, rather than an additional increase within the non-NCOP cohort.

6. Links with Schools

Currently, Pathways has worked with over 30 target schools and colleges in Northamptonshire and Leicestershire building strong relationships with the school's staff. In Northamptonshire and Leicester College, the appointment of 6 school coordinators, Pathways staff working in schools, helped build stronger links. The school coordinators help with recruiting students on to activities and they hold assemblies to discuss career options, and guide students. Since the school coordinators started their roles in schools, the relationships with schools have developed which, hopefully, will improve the effectiveness of the NCOP interventions in Phase Two.

7. Conclusion and Recommendations for Moving Forward

One of the recommendations that the ISII team has made in previous reports (Pathways bi-annual report 2018, and the interim report December 2018) was family engagement. Based on the monitoring and evaluation evidence so far, it is important to emphasise once more that the relationship between HE providers, schools and parents is crucial. It is also stated on CFE's (2018) NCOP Year 1 report that "parents are a huge influence on decisions that young people make about careers and education" and more importantly parents of disadvantaged students are more likely to question the value and cost of HE.

Our data from different events, such as Women into Steam, suggests that parents, especially mothers, have a direct influence on the students' choice and students have stated in the surveys that their mothers and fathers had a significant impact on their decision-making process. The survey data also showed that teachers had a significant impact on the participants. The data from the Car Crash Careers Day, Big Bang Northants and Girls into STEM evaluations also indicate that students take their families' as well as teachers' ideas into consideration. The students' backgrounds, family ties and their relationship with their teachers are important to them. This data, along with the available literature (see: Reay et al., 2010; Reay, 1998; David et.al, 2003), tell us that there needs to be a focus on activities that include parents. The feedback we receive from teachers on NCOP activities is significant since they have a significant impact on their students' choices. One of the aims of NCOP is to ensure that the key influencers, which the evidence suggests are parents and teachers, receive communication and information on HE and Pathways engage with them. Therefore, it is important moving forward that there is more engagement both with parents and teachers.

Importantly, one of the activities, Year 10 Holiday Club, indicated that the majority of the students perceive "distance" is an issue when they consider applying to university. Those students participated in the ISII's surveys emphasised that one of the reasons why they may not apply for university is that they do not want to live far away from their homes. This finding tells us that the local universities have a crucial role to play alongside schools to inform students about their facilities and provide more information different accommodation options they have so that the students could live home and still go to university if they prefer to. Data from the Residentials indicated that the students had the opportunity to learn about different subjects and experienced how a university life could be, which aligns with NCOP's aims to increase awareness in HE. However, the students also gave feedback on the fact that they still have concerns regarding how to apply for university and not having enough information on accommodation.

Lastly, having a positive role model is another significant finding that came out of our data. The evidence suggested that students seem to respond well to having a role model. It increased their self-confidence and helps them think about their future.

Narrowing the monitoring and evaluation down to ten spotlight activities across the consortium has allowed the research to be more focused. This, along with the use of school coordinators in Northamptonshire and Leicester College, meaning better access to students, should improve the quality of the monitoring and evaluation data and enhance the impact of the NCOP. The relationship between the school coordinators and the evaluation team is an important one since the school coordinators help access students to arrange surveys, focus groups and interviews with the students. Another recommendation for moving forward would be that Theory of Change (ToC) should be used throughout the teams to improve the quality of activities and to pinpoint the objectives of each activity. The outcome of the activities would be more beneficial if activity leaders and the ISII team were to integrate ToC into their designs.

8. Sharing the Best Practice

The ISII team also have attended a variety of meetings to improve our evaluation techniques, to collaborate with other teams and share best practice with NCOP practitioners/evaluation teams from across the country. Both the members of Pathways and ISII team joined in a CFE webinar: Learning from phase one of NCOP: progress, impact and future developments "on 19th of June 2019 to learn about different NCOP teams' experiences from Phase One. The presentations from different

practitioners indicated that it is important to focus more on increasing students' self-efficacy, resilience and confidence. During the webinar, it was also recommended that ToC should be applied for each NCOP activity and try to measure changes that could take place during and after the participation in activities.

The ISII team will be attending an academic conference in September, the British Educational Research Association (BERA) 2019 where they will present their findings from Phase One in relation to methodological challenges and the lessons learnt.

9. References

Commando Joe's. (2018). https://commandojoes.co.uk/why-us/.

HEFCE. (2018). Year one report of the national formative and impact evaluation, including capacity building with NCOP consortia March 2018. [Online] Available at: http://cfe.org.uk/app/uploads/2018/08/2018_ncopyear1.pdf

Mills, H.E., McNarry, M., Stratton, G., Mellalieu, S.D. and Mackintosh, K.A. (2015) 'Investigating the effectiveness on educational attainment and behaviour of Commando Joe's: a school-based, military-ethos intervention', Archives of Exercise in Health and Disease, 5 (1-2), pp.377-384.

10. Appendices

A. Online Teacher's Surveys – The Big Bang Northants

Teacher survey on BOS and completed on iPads.

1. What is the name of your school?
Primary   Secondary
2. What impact are you hoping TBBN will have on your students? (please tick all that apply)
Fun/ free event   Encourage them to consider HE   Encourage them to study STEAM
          Broaden their horizons   Encourage them to focus in school
Encourage them to work harder   Other, please specify
3. Please indicate your views on the statements below (Likert scale)
4. Girls are keener on STEM (Science, Technology, Engineering, Maths)
5. Boys are keener on STEM
6. Girls are keener on STE**A**M (Science, Technology, Engineering, Arts, Maths)
7. Boys are keener on STE**A**M
Varies, gender isn't the issue
8. Do you think events like this one make any difference when it comes to closing the gap (social mobility) in HE?
Yes   No   Don't know   Other, please specify

9. Do you think TBB has more of an impact on some students than others? (considering age, gender, ethnicity, socio-economic situation) Please answer below:
10. Would you recommend TBBN to a colleague? Why/Why not?
11. Can you suggest one improvement to TBBN event?
12. What is the best thing about TBBN?
13. Would you come to TBBN again?
14. What are your views on what your local university (University of Northampton/ Leicester/ Loughborough) already does in terms of encouraging students into HE?

What do you think is the biggest barrier for your students when it comes to HE?
I would be interested in being interviewed for the research on NCOP interventions and their impact please contact me on: email address: ……………………………………………………………………………………………..
Thanks for your time

B. Girls in STEM survey

The survey draft can be reached from this link: https://northampton.onlinesurveys.ac.uk/girls-in-stem-on-the-spot-survey-leicester-copy

C. Year 10 Holiday Club Pre- & Post Surveys

Year 10 Holiday Club (PRE)

We hope you will enjoy taking part in the Year 10 Holiday Club. To help us understand more about you and continue to improve our activities we would be grateful if you could spare some time to complete this survey. The data you provide will only be used for research purposes, and all information will be held safely and confidentially. Any data shared with third parties including, the Higher Education Funding Council for England (HEFCE), Office for Students (OfS) and the East Midlands Widening Participation Research and Evaluation Partnership (EMWPREP) or used in reports will be anonymised which means it will not be possible for anyone to identify you. Any data collected is held in accordance with the terms of the GDPR.

Name	
Gender	⭕ Male ⭕ Female ⭕ Transgender ⭕ Prefer not to say
School	
Postcode	

1. **What are you hoping to achieve as a result of taking part in Holiday Club?**

_____
_____
_____

2. **What are your expectations from this week?**

_____
_____
_____

3. **Are you planning to go to university or a higher education college in the future?**

⭕ Yes   ⭕ No   ⭕ Not sure

Please explain your answer to question 3

_____

_____

_____

4. **If you would like to go university or a higher education college in the future, what subject(s) would you like to study and why? / If you are not planning on going please explain why.**

_____

_____

_____

5. **What would stop you from going to University?**

_____

_____

_____

6. **How far you would agree or disagree with the following statements?** *Please tick one for each statement*

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Not sure
I have a good understanding of university life	❑	❑	❑	❑	❑	❑
I am aware of the range of undergraduate degree programmes available	❑	❑	❑	❑	❑	❑
I have a good understanding of how to apply to for student loans	❑	❑	❑	❑	❑	❑
I get enough information about university tuition fees and living costs	❑	❑	❑	❑	❑	❑
I am confident that I can achieve the grades needed to get into university or a higher education college	❑	❑	❑	❑	❑	❑
I am confident that I would 'fit in' at university	❑	❑	❑	❑	❑	❑
I am motivated to do well in my school/college work	❑	❑	❑	❑	❑	❑

7. **Please rate how confident you feel from 1 (highest) to 5 (lowest) about the following skills.** *Please tick one for each statement*

	1	2	3	4	5	Not sure
Working successfully as part of a team	❑	❑	❑	❑	❑	❑
Solving problems and negotiating	❑	❑	❑	❑	❑	❑

Communication skills	❏	❏	❏	❏	❏	❏
Taking lead in presentations and activities	❏	❏	❏	❏	❏	❏
Planning and preparing an event	❏	❏	❏	❏	❏	❏
Coming up with new ideas and presenting them to my peers	❏	❏	❏	❏	❏	❏

Year 10 Holiday Club (POST)

We hope you enjoyed taking part in the Year 10 Holiday Club. To help us understand more about you and continue to improve our activities we would be grateful if you could spare some time to complete this survey. The data you provide will only be used for research purposes, and all information will be held safely and confidentially. Any data shared with third parties including, the Higher Education Funding Council for England (HEFCE), Office for Students (OfS) and the East Midlands Widening Participation Research and Evaluation Partnership (EMWPREP) or used in reports will be anonymised which means it will not be possible for anyone to identify you.   Any data collected is held in accordance with the terms of the GDPR.

Name	
Gender	◯ Male ◯ Female ◯ Transgender ◯ Prefer not to say
School	
Postcode	

8. **What were you hoping to achieve as a result of taking part in Holiday Club?**

_____
_____
_____

9. **What were your expectations from this week?**

_____
_____
_____

   a. **Has the event met your expectations? Why/Why not?**

_____
_____
_____

10. **Are you planning to go to university or a higher education college in the future?**

◯ Yes   ◯ No   ◯ Not sure

Please explain your answer to question 3

_____

_____

_____

11. **If you would like to go university or a higher education college in the future, what subject(s) would you like to study and why? / If you are not planning on going please explain why.**

_____

_____

_____

12. **What would stop you from going to University?**

_____

_____

_____

13. **How far you would agree or disagree with the following statements?** _Please tick one for each statement_

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	Not sure
I have a good understanding of university life	❏	❏	❏	❏	❏	❏
I am aware of the range of undergraduate degree programmes available	❏	❏	❏	❏	❏	❏
I have a good understanding of how to apply to for student loans	❏	❏	❏	❏	❏	❏
I get enough information about university tuition fees and living costs	❏	❏	❏	❏	❏	❏
I am confident that I can achieve the grades needed to get into university or a higher education college	❏	❏	❏	❏	❏	❏
I am confident that I would 'fit in' at university	❏	❏	❏	❏	❏	❏
I am motivated to do well in my school/college work	❏	❏	❏	❏	❏	❏

14. **Please rate how confident you feel from 1 (highest) to 5 (lowest) about the following skills.** _Please tick one for each statement_

	1	2	3	4	5	Not sure
Working successfully as part of a team	❏	❏	❏	❏	❏	❏
Solving problems and negotiating	❏	❏	❏	❏	❏	❏
Communication skills	❏	❏	❏	❏	❏	❏
Taking lead in presentations and activities	❏	❏	❏	❏	❏	❏
Planning and preparing an event	❏	❏	❏	❏	❏	❏
Coming up with new ideas and presenting them to my peers	❏	❏	❏	❏	❏	❏

15.   What was the most useful thing about Year 10 Holiday Club and why?

_____
_____
_____

16.   What was the least useful thing about Year 10 Holiday Club and why?

_____
_____
_____

17.   From the academic subjects below, please circle the one you liked attending the most:
   a. Marketing
   b. Footwear Design
   c. Graphic Design
   d. English (Creative Writing)
   e. Media and Communications (Social Media)
   f. Photography

Please tell us why you liked this subject the most:

_____
_____
_____

D. Commando Joe's Focus Group Questions
1.   What do you think of the activity, Commando Joe's so far?
2.   How does the activity make you feel?
3.   What do you like the most about the activity? Can you give us an example?
4.   If you were inviting one of your friends to participate in Commando Joe's, how would you describe it?
5.   Before the activity, did you feel like you needed make any changes in any aspects of your life?
   a.   So, do you think, the activity helps you think about changes that you wanted to make in your life?
6.   Do you think Commando Joe's make you think differently about your future? (If yes, can you   please tell us how?)
7.   Do you feel more motivated about your future since you have been attending Commando Joe's?
8.   Anything else you (all) would like to add?

E. PET-Xi Focus Group Questions

1. What did think of the PET-Xi Training?
2. How did you feel about Maths before attending the training day?
    a. How do you feel about Maths now after attending the training?
3. What do you like the most about the training day? Can you give us an example?
4. Before the activity, did you feel like you needed make any changes in any aspects of your school life?
    a. So, do you think, the activity helps you think about changes that you wanted to make in your school life?
5. Do you think PET-Xi make you think differently about your future? (If yes, can you please tell us how?)
6. Do you feel more or less motivated about school or Maths since you attended PET-Xi training?
7. Anything else you (all) would like to add?

F. Use of Storyboards

Use of story boards – NCOP 2018-19 research

The idea of using story boards in research is to encourage more participatory research and student input and also to allow for difficult ideas and concepts to be explained, e.g. concepts such as aspirations, and class /socio-economic differences. The method can also allow researchers and participants to see change, or not, over time.

A focus group of students 4-7 should first have the purpose of the research explained, then the method, then consent should be given.

Researchers should start discussion about school/ attitudes/kids like them from their street-school- home town/parents' employment/ aspirations

Students are then asked to complete a three-part storyboard (A3 paper easiest for this)

Part 1 – shows where they've **come from**, their backgrounds/parents/homes

Part 2- shows where they **are now** in relation to the issues discussed above, e.g. at school working hard/ bored/ focused/confident/in trouble/not attending etc.

Part 3- shows where they **want to be** in the future, say in ten years, e.g. aged 21-28 in relation to the issues above.

G. Pre- and Post-Surveys for 1851 Sailing Event

Pathways 1851 High SEAS Experience (T1)

We hope you will enjoy taking part in "Pathways 1851 High SEAS Experience". To help us understand more about you and continue to improve our activities we would be grateful if you could spare some time to complete this survey. The data you provide will only be used for research purposes, and all information will be held safely and confidentially. Any data shared with third parties including, the Higher Education Funding Council for England (HEFCE), Office for Students (OfS), and the East Midlands Widening Participation Research and Evaluation Partnership (EMWPREP) or used in reports will be anonymised which means it will not be possible for anyone to identify you. Any data collected is held in accordance with the terms of the GDPR regulation.

Name				
Gender	⭕ Male	⭕ Female	⭕ Transgender	⭕ Prefer not to say
School/				
Postcode/Address				

1. What is your favourite subject at school? Please explain why.

_____
_____
_____
_____

2. Why do you think it is important to study a STEM (Science, Technology, Engineering, and Maths) subject?

_____
_____
_____
_____

3. Which STEM subject are you interested in?
   a. Science
   b. Technology
   c. Engineering
   d. Maths

4. Have you always been interested in the subject you circled above?
   a. Yes
   b. No
   c. I do not know

5. In your opinion, what are the reasons for studying a STEM subject?
   a. Job potentials after graduation
   b. Good salary
   c. STEM subjects are intellectually stimulating/challenging
   d. To make a difference
   e. Our country is in need of STEM graduates

6. If you would like to go university or a higher education college in the future, what subject(s) would you like to study and why? / If you are not planning on going please explain why.

_____
_____
_____
_____

7. Who have you been influenced by in your decision to pursue a career in STEM?
   a. Parents
   b. Friends
   c. Myself
   d. Others (please specify):

8. **What are you hoping to achieve by attending *Pathways 1851 High SEAS Experience*?**

_____
_____
_____
_____

9. What are your expectations from the *Pathways 1851 High SEAS Experience* event?

_____
_____
_____
_____

10. Do you have any other comments you would like to make about STEM/HEIs/sailing event?

_____
_____
_____
_____

Thank you for your time.

We hope you enjoyed taking part in "Pathways 1851 High SEAS Experience" on 1st and 2nd of May 2019. To help us understand more about you and continue to improve our activities we would be grateful if you could spare some time to complete this survey. The data you provide will only be used for research purposes, and all information will be held safely and confidentially. Any data shared with third parties including, the Higher Education Funding Council for England (HEFCE), Office for Students (OfS), and the East Midlands Widening Participation Research and Evaluation Partnership (EMWPREP) or used in reports will be anonymised which means it will not be possible for anyone to identify you. Any data collected is held in accordance with the terms of the GDPR regulation.

Name	
Gender	◯ Male ◯ Female ◯ Transgender ◯ Prefer not to say
School/	
Postcode/Address	

11. What is your favourite subject at school? Please explain why.

_____
_____
_____
_____

12. Why do you think it is important to study a STEM (Science, Technology, Engineering, and Maths) subject?

_____
_____
_____
_____

13. Which STEM subject are you interested in?
     a. Science
     b. Technology
     c. Engineering
     d. Maths
14. Have you always been interested in the subject you circled above?
     a. Yes
     b. No
     c. I do not know

15. In your opinion, what are the reasons for studying a STEM subject?

     a. Job potentials after graduation
     b. Good salary

      c.   STEM subjects are intellectually stimulating/challenging
      d.   To make a difference
      e.   Our country is in need of STEM graduates

16. If you would like to go university or a higher education college in the future, what subject(s) would you like to study and why? / If you are not planning on going please explain why.

  _____
  _____
  _____
  _____

17. Who have you been influenced by in your decision to pursue a career in STEM?
      a.   Parents
      b.   Friends
      c.   Myself
      d.   Others (please specify):

18. **What were you hoping to achieve by attending *Pathways 1851 High SEAS Experience*?**

  _____
  _____
  _____
  _____

19. Has the event met your expectations? Why/Why not (please explain below)

_____
_____
_____
_____

20. Please tell us if there was anything you particularly enjoyed or did not enjoy about the event and why?

  _____
  _____
  _____
  _____

21. Do you have any other comments you would like to make about STEM/HEIs/sailing event?

_____
_____
_____
_____

Thank you for your time.

H. Car Crash Careers Day Pre- and Post-Student and Teachers Surveys (PDF links)

a. *Teacher surveys' PDF link:*

Car crash careers day
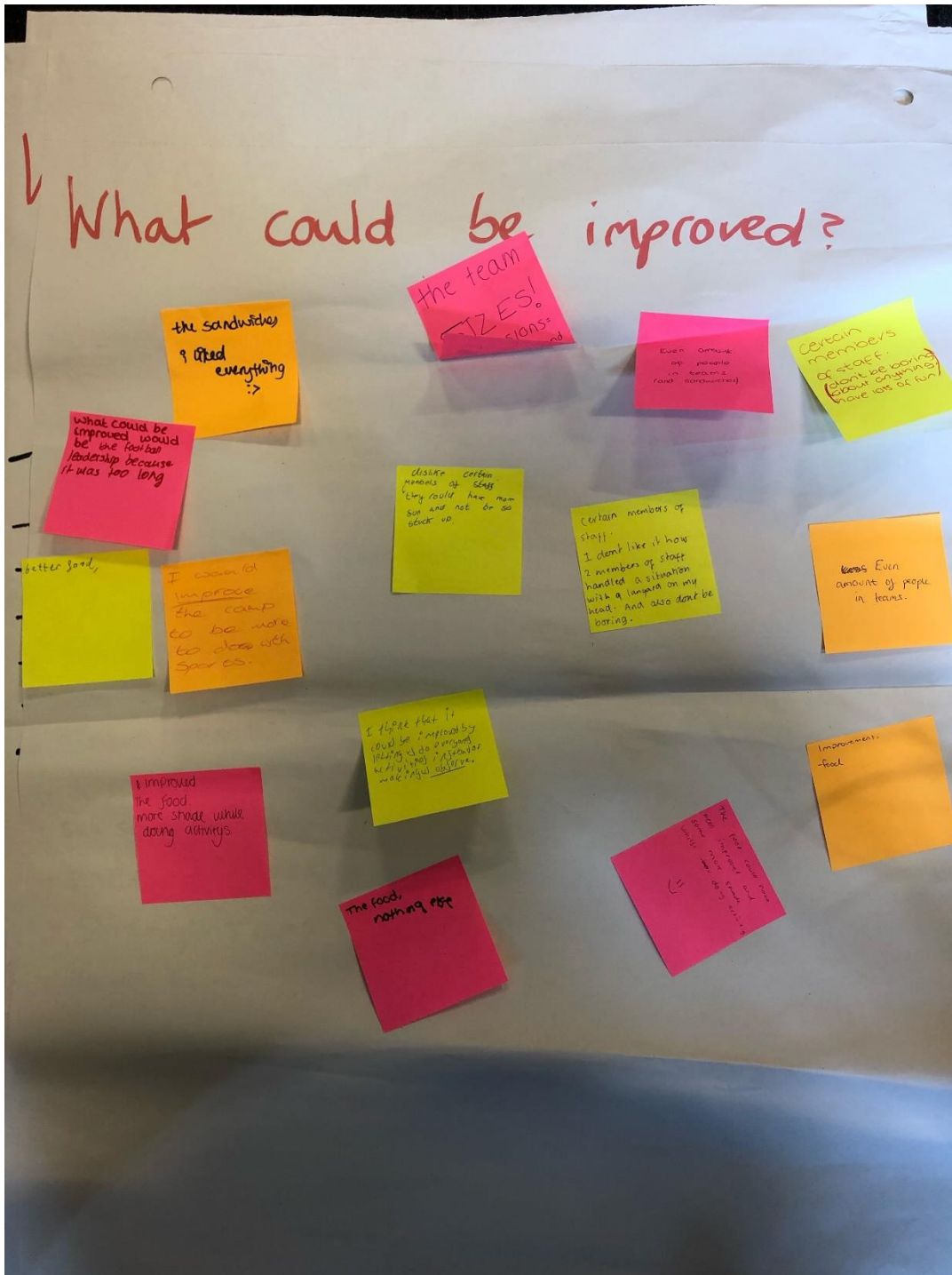 teacher surveys.pdf

b. Pre- Survey's PDF link:

car crash careers day
T1.pdf

c. Post- Survey's PDF link:

car crash careers day
T2.pdf

I. Pictures from YSA GO Camp

What have I learnt?

- how to improve my confidence and communication skills. i can step out of my comfort zone.

- I learnt That I can come out my comfort zone

- how to step out of my comfort zone and be confident

- How to work better as a team.

- Learnt about the 4 corner method and step.

- I have learnt about the STEP method

- I have learnt to improve my speaking that I have to be louder and speak clearly

- I have learnt, smiles step and the four corners to be more confident.

- I've learnt smiles + step method 4 corners.

- I have learnt - to be more confident - to never give up - learnt new games

- How to talk to people I don't know

- I've learnt I can be confident and step out my comfort zone also learnt about STEP SMILES and STEP

- That it can rain fish, how to be more confident

- I learnt about step and the 4 corner method

- I learnt about

What have I enjoyed?

- zombie game
- football leadership
- the team activities
- dragon's den
- frisbee

I've enjoyed playing the gateway game and crossfit.

crossfit
football leader
session

I enjoyed the teambuilding challenges

I enjoyed the football leadership session

I enjoyed the 'duck waddling' warm up in cross fit

I enjoyed the football leader session.

I have enjoyed the team challenges, and playing/teaching the new games

I have enjoyed doing the team challenges

I've enjoyed the team challenges and leading in our own session and becoming a massage version :)

I enjoyed playing dodgeball, most of the team challenges, zombie, meeting new friends.

I have enjoyed
- the team challenges
- doing crossfit
- meeting our own activities
- our nice bus drivers :)

What I've enjoyed:
- Team challenges
- Zombie game
- football leadership
- enjoyed talking to new people

I have enjoyed the different activities because they were different to what I was used to

The zombie game and the football leadership things an also presenting

Good Sandwiches e.g. cheese, bacon
Better Bacon
Just Ham (More sports e.g. football, cricket, running etc.)

More sports like netball, football etc.

do more sports because at school it is advertised as a sports camp.

More games
- Zombie
- guess the leader etc

Different sandwiches- e.g. chicken, bacon, beef etc.
More team activities
More sports - e.g. swimming, netball, handball

have different selection of sandwiches sandwichs
do more sports

Put in more physical activities.

use less paper
do more sports

Team activities
Crossfit
Dragons Den

tour of the uni
crossfit
ultimate frisbie

Good sandwiches:
- Bacon
- Just Ham
- Just cheese
(more sports e.g. football, rugby, cricket)

Crossfit frisbee
Making our own sports game

Crossfit
More lunch
Social k baur
Team challenges
Dragons Den

team challenges (fun)

He team challenges

Do ultimate frisbee / crossfit

The physical activities and the volunteering ideas
team games

the challenges + team