MSC Summer Schools Annual Report

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2022

msc Medical Schools Council

Contents

Introduction

This report evaluates the targeting and impact of the MSC Summer Schools that have taken place during 2022. Longitudinal evaluation is taking place to understand the final outcomes of the students that took part, this will be part of a research project during 2023.

The report involves:

- Analysis of the summer school participants' characteristics (including comparison with previous years)
- Analysis of the effectiveness of targeting cold spots and areas of multiple deprivation (including comparison with previous years)
- Consideration if any differences between online and residential summer schools
- An evaluation of the students' attitudinal change before and after the summer school (including comparison with 2021)
- An in-depth exploration of students views through semi-structured interviews

The report is split into five chapters, with the findings summarised in the Executive Summary.

Executive summary and recommendations

The MSC Summer Schools provide an insight into medicine and healthcare alongside information and advice on how to apply to medicine. The aim has been to target students who are under-represented in medicine, supporting greater diversity.

Findings

In 2022 we ran a mix of residential and online summer schools. Against a target of 430 students the MSC recruited 419 students to the summer schools. We missed the target by 2.56%.

The eligibility criteria adopted are tightly defined, ensuring that through a basket of measures the MSC targets the most under-represented and those that would benefit the most from this intensive support. The criteria used to select students to the summer schools are more robust than those commonly used to define widening participation students as they look at an individual rather than using just geographic measures which are more liable to produce false positives. All 419 students met the tightly defined criteria.

Of the 419 students who participated on the programme we see that the programme focussed on the most disadvantaged and has been able to focus on those facing the greatest challenges and difficulty accessing both higher education and medicine. The majority of the students met three or four of the eligibility criteria.

We find that:

- 37.2% of the students were from cold spots. This is an increase from the previous year (25.2%).
- A high proportion of participants were female (71.1%). However, there is an increasing male attendance at 26% compared to 21% last year.
- We have had more students from the lowest POLAR4 quintiles than previous programmes. We had 57.8% compared to below 50% for the previous two years.
- When the summer school participants are compared to medical school applicants and students in POLAR 4 we have recruited a more socially diverse group, representing the areas of lowest higher education participation rates.

- 47.3% qualified for Free School Meals (or other direct financial support measures) against a national average of 17.7%. This is a huge increase on the previous year (22.4%).
- 22 students have been or are in local authority care. This compares to only 10 students entering medicine in 2017 from a care background. This is our highest proportion of the cohort to date at 5.3%.
- There is a greater representation of students from a minority ethnic background compared to the national population or the composition of medical students. There were proportionally more students from an Asian or Black background (for all categories) attending the summer school than applicants to medicine.
- We had 18 students recording that they were estranged from their parents, this is 4.3% of the cohort. This is an increase from previous years; last year it was 1.5% of the cohort.
- We have 37 students reporting that they were a young carer. This is 8.8% of the cohort, which compares well with the previous year of 9.2%.
- 41.8% of the participants had parents who had not attended higher education.

It appears that those who do not have home-based responsibilities are as easily able to attend a residential programme as one run online.

Against all measures, the MSC have recruited students who are most under-represented in medicine (and higher education). When the summer school participants are compared to medical school applicants and students the MSC have recruited a more socially diverse group, representing the areas of lowest higher education participation rates and the most deprived communities.

Importantly, through the attitudinal gain survey and interviews there has been a significant impact on the students participating on the summer schools.

The survey found:

- Students felt more confident in applying to medicine (up 18%). This was an improvement from last year.
- There was also a substantial increase in students' confidence in presenting their thoughts and ideas to others up 21% (compared to 15% last year). With 13% also stating an increase in confidence when interacting with a wide variety of people
- There has been an increase in the understanding of careers available in health, up 20%.

- 16% report being more comfortable in a university or higher education environment.

The interviews found that:

- The summer schools were largely beneficial to the participants, as it helped them feel part of a community, helped them understand how medical school works and increased their confidence in their application and going to medical school.
- A sense of community emerged from all of the summer schools.
- Participants felt more confident in their applications after the summer school but had concerns about finances and workload.
- The summer schools helped to demystify higher education and made the concept of university and medicine more understandable and less elusive to the participants.
- In the online summer schools there was social connectedness (the experience of being able to communicate and familiarise themselves with people from similar backgrounds, in similar situations) in different locations all at once. This connection allowed a sense of community to be felt between participants and were able to form friendships and learn from each other.
- Participants liked that it was not just medicine but included allied health professions, and the patient engagement.
- Food options were not inclusive within all residential summer schools.

Recommendations

The MSC wishes to continually enhance the programme.

The following recommendations are made:

Targeting

- Over programming our summer schools to ensure that targets are met. The organising team should contract with hosts for additional places to ensure that targets are met. This will help mitigate against late non-attendance or no-shows.
- A greater targeting of male applicants to the programme.
- Continue to target those who are at greatest disadvantage, for example care experienced students.
- To continue to focus on the cold spots and further extending our reach.

Content

- Continue to showcase a wide variety of healthcare careers
- Continue to ensure that the summer school supports the building of confidence in their application to medicine
- Continue to include activities that allow the students to interact with real or role play patients
- Ensure food provided is inclusive for students
- Implement more sessions that give students individualised application guidance
- Implement sessions that inform students of potential financial help available for them

Background

The Medical Schools Council has been awarded funding from Health Education England to run residential summer schools. The objectives are to:

- Deliver a high-quality summer school programme which provides accurate, up-to-date advice on medicine and healthcare across England
- Work with young people from geographical areas that have limited access to medicine-related outreach (the 'cold spots')
- Offer an England-wide approach with accessible summer school provision across the country
- Develop a sustainable programme that will continue beyond this funding period by supporting individual medical schools to co-create and adopt best practice.

During 2022 we ran a series of residential and online summer schools. We wished to recruit 430 students from disadvantaged or under-represented backgrounds in Year 11 and Year 12. The summer schools were run by:

- Anglia Ruskin Medical School (residential)
- Exeter Medical School (residential)
- Hull-York Medical School (online)
- Imperial Medical School (residential)
- Lancaster Medical School (residential)
- Leicester Medical School (residential)
- London Medical Schools (online)

To be eligible for the programme students had to be from a widening participation background, which we identified from a list of eligibility criteria (see below). We targeted and then prioritised students who were from a cold spot area (that is from an area where there is limited engagement by medical schools). All eligible students were then prioritised using a weighting system on each of the criteria. Our criteria was determined following previous year's best practice, alongside consultation with universities and medical schools and alignment with the MSC's best practice guidance for contextual admissions[1].

1 https://www.medschools.ac.uk/media/2413/good-practice-in-contextual-admissions.pdf

To be eligible for the programme the students must be currently living and studying at a state school in England and either be:

- In, or been in local authority care[2]
- An estranged student who is studying without the support and approval of a family network.
- An asylum seeker or refugee

Or hold a minimum of two of the following:

- Studying in a state school that achieved below the national average Attainment 8 score at GCSE. If this is not available for applicants previous school information can be used where they had attended to the age of 16.[3]
- Studying in a state school that achieved below or well below the national average Progress 8 score. If this is not available for applicants previous school information can be used where they had attended to the age of 16.[4]
- From a school with a high percentage of students receiving free school meals.[5,6]
- Living in a geographical area with low levels of progression onto higher education.[7]
- Are a young carer aged under 18 who helps to look after someone in their family, or a friend, who is ill, disabled or misuses drugs or alcohol. To qualify as a young carer they must be caring above and beyond what is normally expected, there is no time

2 Experience of local authority care is defined as being looked after by a local authority, foster parents/other family members, at home with their parents under the supervision of social services, in a residential children's home or in another residential setting such as school or secure unit, or someone who has experienced a period of three months in the care of the local authority within the last ten years.

3 We will use the England average score of Attainment 8 to be 46.7 out of 90. This is the latest statistic for 2018/19 the average score for 'Attainment 8' (which measures pupils' performance in 8 GCSE-level qualifications). There is only a limited set of data available for 2020 and 2021. Available at https://www.compare-school-performance.service.gov.uk/

4 This will be any school that gets below 0 (zero) as its Progress 8 score.

5 The percentage of students' eligible for free school meals is 20.8% or above.

6 If this information is not available for their current school, for example they are now attending a college, we will accept the school the free school meal data for the school attended at age 16.

7 This is available at www.officeforstudents.org.uk/data-and-analysis/postcode-search/. When using POLAR we will use POLAR4. POLAR4 students from quintile 1 and 2 will automatically meet this criterion.

limit on the amount of care they provide for their dependants

- From a family where the parents do not have a university degree from the UK or abroad
- In receipt of or eligible for free school meals or the 16-19 Bursary Fund or Discretionary Learner Support or Means Tested Benefit or Pupil Premium

The specification also expects participants on the programme to have:

- The potential to study medicine and be capable of achieving the minimum grades required for entry (whether that is for standard entry programmes or programmes with a gateway year)
- An interest in STEM subjects and be considering studying science in their post-16 studies and medicine post-18

For students that studied outside the UK, and took their GCSEs/equivalent overseas they would still need to meet two of the eligibility criteria (school criteria would be excluded). For students attending colleges and sixth forms where there is no FSM data, we accepted their previous school (in which they took their GCSEs).

Whilst each summer school had its own distinctive nature they operated within a common framework. All had:

- A simulated experience of what it is like to study medicine, (including a range of teaching methods), not only to consider the choice of medical school but also aid transition from sixth form study to university
- The values and behaviours of doctors and medical students
- Dedicated sessions that focus on the shortage specialties, especially general practice
- Confidence and social capital building activities (including meeting academics and medics)
- Opportunity for students to discuss their options and seek advice
- Overview of the range of medical careers available (including other healthcare and non-patient focused options)
- Application and admissions advice and support, including preparation for interviews and admissions tests.
- Social activities for the students to build a community and network amongst like-minded people.

Participant characteristics

Headlines

- We recruited 419 students to the summer schools. Our target was 430 students. This is 2.56% off target.
- 47.5% (199) were from Year 11, and 51.3% (215) from Year 12.
- 37.2% of the students were from cold spots. This is an increase from the previous year (25.2%).
- For the first time we analysed the proportion of students with multiple eligibility criteria. We found that the majority of students met three or four criteria.
- A high proportion of participants were female (71.1%). However, there is an increasing male attendance at 26% compared to 21% last year.
- We have had more students from the lowest POLAR4 quintiles than previous programmes. We had 57.8% compared to below 50% for the previous two years.
- When the summer school participants are compared to medical school applicants and students in POLAR 4 we have recruited a more socially diverse group, representing the areas of lowest higher education participation rates.
- 47.3% qualified for Free School Meals (or other direct financial support measures) against a national average of 17.7%. This is a huge increase on the previous year (22.4%).
- 22 students have been or are in local authority care. This compares to only 10 students entering medicine in 2017 from a care background. This is our highest proportion of the cohort to date at 5.3%.
- There is a greater representation of students from a minority ethnic background compared to the national population or the composition of medical students. There were proportionally more students from an Asian or Black background (for all categories) attending the summer school than applicants to medicine.
- We had 18 students recording that they were estranged from their parents, this is 4.3% of the cohort. This is an increase from previous years; last year it was 1.5% of the cohort.

- We have 37 students reporting that they were a young carer. This is 8.8% of the cohort, which compares well with the previous year of 9.2%.
- 41.8% of the participants had parents who had not attended higher education.
- It appears that those who do not have home-based responsibilities are as easily able to attend a residential programme as one run online.

Recommendations

- Over programming our summer schools to ensure that targets are met. The organising team should contract with hosts for additional places to ensure that targets are met. This will help mitigate against late non-attendance or no-shows.
- A greater targeting of male applicants to the programme.
- Continue to target those who are at greatest disadvantage, for example care experienced students.
- To continue to focus on the cold spots and further extending our reach.

We analysed the participants against a series of socio-economic and educational categories. All students were eligible for the programme, and so met the definition of being from under-represented or disadvantaged backgrounds.

Methodology

The data was collected by the hosts through a combination of:

- Information provided by the student
- Confirmation and further information provided by the teacher
- Review of school data

Analysis

Numbers participating

During 2022, with these summer schools, our target was to engage 430 students, but we contracted for 419 students. This is 2.56% off target.

We used 2020-1 underspend to contract with Anglia Ruskin Medical School for an additional summer school to support the achievement of the targets.

However, there was an under-achievement in numbers. The difference was mainly due to late cancellations and no-shows, which are difficult to manage. One host found that the first train strike fell at the start of the residential *'With 80% of students travelling by train a significant number were impacted and not confident to attend the residential providing reasoning related to the transport issues'.* All residentials were also impacted by COVID-19 with the student or family members contracting it.

It is difficult to over-programme residential programmes due to the cost of accommodation.

Medical School	Target numbers	Participants
Anglia Ruskin		31
Exeter	70	68
Hull-York	75	65
Imperial	70	67
Lancaster	70	58
Leicester	70	67
London	75	63
Total	**430**	**419**

Table 1: Participants on the summer school

*Anglia Ruskin was funded by underspend to support the achievement of the targets.

For those that provided information (all, 419), 47.5% (199) were from Year 11, and 51.3% (215) from Year 12. We had one student in Year 10, and four in Year 13.

Engagement in the cold spots

One of the objectives of the summer schools is to increase engagement in the cold spots. The cold spots are defined as those areas in which the secondary schools have limited engagement with medical schools (that is at less than 50%). This was also extended to include 'cold schools' that do not engage with medical schools.

It was recognised that there were significant difficulties in engaging with the cold spots. Schools are cold for a reason, for example, remote location, facing challenging circumstances or low academic performance. The programme, therefore, prioritised cold spots but was not exclusive to these areas.

This year there has been an increase in the numbers from cold spots. 2021 had an exceptionally high number of students, with additional numbers due to the programme being online.

Area	2022 %	2022 N	2021 %	2021 N	2020 %	2020 N
Non-cold spot	62.8%	263	74.8%	618	38.25%	280
Cold spot	37.2%	156	25.2%	208	61.75%	452

Table 2: Participants from cold spots

Multiple criteria

We have a basket of measures that determine eligibility to the programme. Students need to meet at least two of the criteria. From our analysis we found that the majority of students met three or four criteria.

Number of criteria	Number of students meeting criteria
2	78
3	113
4	92
5	71
6	18
7	9
8	1

Table 3: Participants meeting a number of eligibility criteria

This shows that we are targeting those at most disadvantage.

Targeting areas of disadvantage

We reviewed the participant's school location based on POLAR 4.

POLAR 4 is used in higher education. POLAR 4 is a classification of areas across the UK based on the proportion of young people who participate in higher education. It looks at how likely young people are to participate in higher education across the UK and shows how this varies by area. It should be noted that POLAR 4 is not necessarily a measure of social disadvantage. Postcodes vary in size across the UK and they also have varying levels of affluence within them. Therefore, a student in quintile five may still be a widening participation student when other criteria are reviewed.

POLAR 4 classifies local areas into quintiles - quintile one shows the lowest rate of participation, and quintile five shows the highest rate of participation.

POLAR 4 Quintile	2022 %	2022 N	2021 %	2021 N	2020 %	2020 N
1-2	57.8%	242	40.0%	329	45.5%	337
3-5	41.5%	174	60.0%	371	54.5%	404

Table 4: Number of participants by POLAR 4 quintile

We had more students from the lowest quintiles than previous programmes. We had 57.8% compared to below 50% for the previous two years.

For individual summer schools there was some difference in POLAR 4. For most summer schools there has been an increase in students from the lowest quintiles.

Summer school	% from POLAR quintiles 1 and 2 2022	% from POLAR quintiles 1 and 2 2021
Anglia Ruskin	51.6	
Exeter	60.3	24.8
Hull-York	53.8	
Imperial	68.7	54.0
Lancaster	48.3	44.6
Leicester	52.2	29.2
LMSS	65.1	68.3

Table 5: POLAR 4 quintiles 1 and 2 for summer schools

Demographic	Measure Values	%	Summer school %
1 and 2- Lowest rates of participation	2100	19.3%	57.8%
3-5 Higher rates of participation	8825	80.7%	41.5%

Table 6: Applicants to medicine in 2018[8] compared to summer school participants in POLAR 4

When we compare the summer school participants against medical school applicants and students we can see we have targeted a much more socially diverse group. We have targeted participants who are from the lowest areas of higher education participation.

Both POLAR 4 quintiles 1 and 2 represent some of the hardest to reach areas for higher education, and in particular a high tariff/aspirational subject such as medicine.

Free school meals

In order to understand socio-economic background we asked about their entitlement to various income support measures, where they in receipt of or eligible for free school meals, the 16-19 Bursary Fund, Discretionary Learner Support or Means Tested Benefit.

From our recorded figures it shows that 47.3% qualified for one of these support measures. This is a huge increase on the previous year (22.4%). We can only compare with free school meals where the national average for free school meals is 17.7%. Whilst we note that we have recorded other measures it demonstrates that the targeting has identified those from lower socio-economic groups.

FSM/Bursary	2022 %	2022 N	2021 %	2021 N	2020 %	2020 N
Yes	47.13%	198	22.4%	185	37.20%	277

Table 7: Participants with FSM or eligible for other measures

8 Notes on applicant data: UK domicile, under 21 yrs old, excludes Buckingham, applicant could apply to more than 1 course, Ns are rounded to nearest 5 and %s are calculated using the rounded data

Have been or in local authority care

It was important for us to ensure we were targeting those most disadvantaged, and least likely to apply for medicine. Currently, only 6% of care leavers go onto university. From the HESA data we see that only 10 students entered medicine in 2017.

We are pleased to see that 22 students were care experienced (compared to 24 last year). This is a higher proportion than last year as it is 5.3% of the cohort (compared to 2.9% last year). We recognise that more needs to be done to support this group and they remain a key target group.

Gender

There was a significant proportion of female participants compared to male. However, there is small increase in the number of male participants.

	2022 %	2021 %
Male	**26.0%**	**21.1%**
Female	**71.1%**	**74.0%**
Non-binary	**1.7%**	**0.4%**

Table 8: Gender of the participants

Ethnicity

Ethnicity data was collected from 417 participants (out of 419).

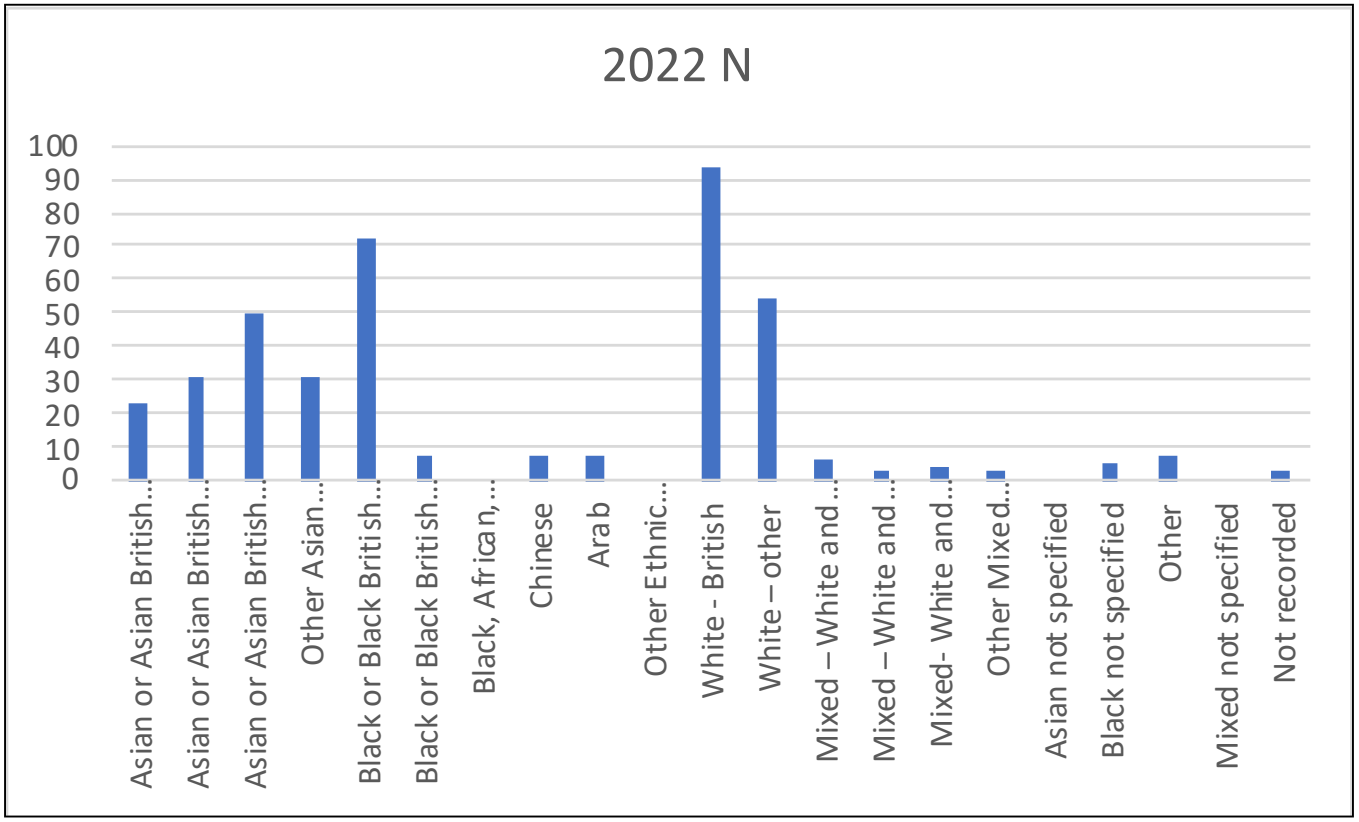


Figure 1: Composition of participants by ethnicity

Ethnicity (grouped)	2022 %	2022 N	2021 %	2021 N	2020 %	2020 N	% at medical school	% UK 18-24 population
Asian or Asian British - Bangladeshi	5.5	23	5.4	34	1.6	12	1.4	1.1
Asian or Asian British - Indian	7.4	31	13.7	86	2.7	20	10.3	3.0
Asian or Asian British - Pakistani	11.9	50	11.9	75	4.3	32	5.1	2.6
Other Asian Background	7.4	31	7.6	48	2.6	19	5.3	1.8
Black or Black British - African	17.2	72	18.6	117				
Black or Black British Caribbean	1.7	7	1.7	11				

Ethnicity (grouped)	2022 %	2022 N	2021 %	2021 N	2020 %	2020 N	% at medical school	% UK 18-24 population
Black, African, Caribbean or Black British					5.6	42	3.0	2.1
Chinese	1.9	8	2.2	14	0.8	6		
Arab	4.3	8	2.5	16				
Other Ethnic Background			3.8	24	2.1	16		
White - British	22.2	93	26.5	167	11.9	89	41.8	75.8
White – other	12.9	54						
Mixed – White and Asian	1.4	6	1.3	8				
Mixed – White and Black African	0.7	3	0.2	1				
Mixed- White and Black Caribbean	0.1	4	1.0	6				
Other Mixed background	0.7	3	0.8	5				
Asian not specified			1.4	9				
Black not specified	1.2	5	1.1	7				
Other	1.9	8						
Mixed not specified			0.3	7				
Not recorded	0.7	3			68.3	509		

Table 9: Composition of participants by ethnicity

We have maintained a diverse cohort. From those recorded we see a greater minority ethnic representation from both the general population and for students within medicine.

Estranged from parents

We had 18 students recording that they were estranged from their parents, this is 4.3% of the cohort. This is an increase from previous years; last year it was 1.5% of the cohort.

Estranged from parents	2022 N	2021 N	2020 N
Yes	18	12	7

Table 10: Number of participants who are estranged from parents

Refugee or Asylum seeker

We had 18 students recording that they were refugees or asylum seekers. This is 4.3% of the cohort. It is an increase from previous years which with 11 participants was 1.3% of the cohort.

Refugee or Asylum seeker	2022 N	2021 N	2020 N
Yes	18	11	4

Table 11: Number participants who are refugee or asylum seekers

Young carer

We have 37 students reporting that they were a young carer. This is 8.8% of the cohort, which compares well with the previous year of 9.2%.

Young carer	2022 N	2021 N	2020 N
Yes	37	76	38

Table 12: Number of participants who are young carers

Parental engagement in higher education

Whether your parents attended higher education is a predictor of whether or not you will attend higher education. We gathered this information from the student's application.

41.8% of the participants had parents who had not attended higher education.

Parental HE	2022 %	2022 N	2021 %	2021 N	2020 %	2020 N
No	41.8%	175	34.3%	283	47.20%	352
Yes	57.0%	239	65.8%	543	52.30%	390
Not recorded		3			0.40%	3

Table 13: Parental engagement in higher education

Online and Residential

This year we had a mix of online and residential summer schools. In total we had 128 students attending the online provision at Hull-York Medical Schools and at the London Medical Schools programme. We had 291 attending the residential programmes at Anglia Ruskin, Exeter, Imperial, Lancaster and Leicester medical schools.

We found that based on the individual criteria:

Criteria	Online % of cohort	Residential % of cohort
In care	**0.8%**	**7.2%**
Refugee/asylum seeker	**4.7%**	**4.1%**
Estranged from parents	**2.3%**	**5.2%**
Young carer	**3.9%**	**11.0%**
No parental degree	**53.1%**	**36.8%**
FSM or other financial support	**39.1%**	**50.9%**

Table 14: Differences between participants on online or residential programmes

It appears that those who do not have home-based responsibilities are able to attend a residential programme.

Attitudinal change

Headlines

- Students felt more confident in applying to medicine (up 18%). This was an improvement from last year.
- There was also a substantial increase in students' confidence in presenting their thoughts and ideas to others up 21% (compared to 15% last year). With 13% also stating an increase in confidence when interacting with a wide variety of people.
- There has been an increase in the understanding of careers available in health, up 20%.
- 16% report being more comfortable in a university or higher education environment.

Recommendations

- Continue to showcase a wide variety of healthcare careers
- Continue to ensure that the summer school supports the building of confidence in their application to medicine

Students were sent a questionnaire before and after the summer school. The change in response provides us with an indication of the attitudinal shift of students following the summer school.

This section is authored by David Wilkinson, Learning Gain.

LEARNING GAIN TOOL® ANALYSIS

USING THE LEARNING GAIN TOOL TO EXPLORE IMPACT ON THE MSC SUMMER SCHOOLS PROGRAMME 2022

Full report

2022

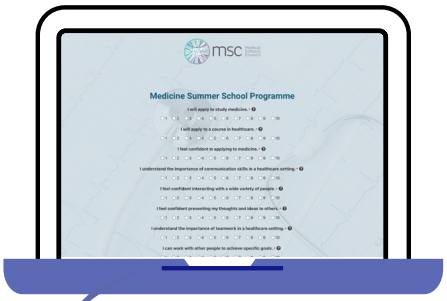
Dr David Wilkinson
Dane McCarrick

Research Toolkit

USING THE LEARNING GAIN TOOL TO EXPLORE IMPACT ON THE MSC SUMMER SCHOOLS PROGRAMME 2022

Introduction

Identifying the factors that predict student engagement in Medicine is essential to understanding future career trajectories in these fields. Research Toolkit utilises the Learning Gain Tool as a novel measurement technique to assess student engagement both pre and post exposure to course content, but also observe important changes over time. Our analysis aims to compare students' interest and engagement in Medicine before (at baseline) and after (at follow-up) their participation in the MSC Summer School.



Questions about interest in **medicine and healthcare**.

Questions about **skills**.

Questions about **university and careers**.

263

Learning Gain surveys completed beginning and end of Summer School (paired responses)

Learning Gain Tool

The Research Toolkit Learning Gain Tool®, is an interactive resource capable of assessing and measuring impact of educational interventions. It uses pre and post-activity data to explore impact from the perspective of the activity participant, school or stakeholder representative. This tool has been used across a number of outreach programmes and is also used by other widening participation providers regionally and nationally to identify effect, impact and distance travelled of educational interventions.

Measuring learning gain

As part of their participation in the MSC Summer School Programme, students were asked to respond to a series of 14 before and after questions or statements. These questions were administered via the use of the online Learning Gain Tool®. Participants on the Summer School Programme were provided with a weblink in order to register on the system and to respond to the questions. The bank of questions were linked to skills, views, and knowledge in a number of areas linked to medicine and healthcare. Questions were developed by Research Toolkit and the Summer School programme team and have been adapted from other similar outreach and widening participation interventions.

Paired-samples t-tests were used to determine whether the mean difference between these two sets of observations were statistically significant. The associated statistical assumption checks (i.e., normality; inferential case/outliers checks) were also run in parallel to these analyses and the data was confirmed suitable for this analysis technique. Only complete cases were used in the analysis.

Research Toolkit Limited
Nexus - University of Leeds, Discovery Way, Leeds, LS2 3AA
david@research-toolkit.co.uk

Research Toolkit

USING THE LEARNING GAIN TOOL TO EXPLORE IMPACT ON THE MSC SUMMER SCHOOLS PROGRAMME 2022

Descriptive analysis: percentage increases

For the purposes of transparency we include the numeric change in average value - from the beginning of the programme to the end of the programme (see TABLE 1: Learning Gain statement analysis: MSC Summer School Programme). For example, the change in value of question 5 (*I feel confident interacting with a wide variety of people*) moves from an average of 7.79 to 8.83 by the end of the programme. To clarify this movement we have converted the change to a percentage figure; using the beginning of the programme as a base this represents a 13% increase at the end of the programme. To aid accessibility, we have also ranked responses by largest learning gain (see TABLE 2: Learning Gain statement analysis - ranked by largest gain).

About the data

Data were collected from participants at the beginning and end of the programme. In order to conduct advanced statistical analyses on our data we have 'paired' responses (participants who completed *both* pre and post programme surveys). Our analysis is therefore based on 263 respondents - see TABLE 3: Learning gain responses by host institution). Participant data were combined to produce an average across the 14 question or statement areas. At the beginning of the programme this resulted in the production of a 'temperature reading' of attitude, perceived skill and understanding. The same process was used for the data collected at the end of the programme. The difference in average values (pre and post programme) produces a distance travelled or 'learning gain' value.

Overall analysis

Questions about medicine and healthcare

Within the question set covering medicine and healthcare, the greatest change was recorded in relation to Q3 - *I feel confident in applying to medicine.* (see TABLE 2: Learning Gain statements ranked by largest gain). This boost in confidence to apply indicates that, across the programme, participants were provided with positive messages about progressing to a medicine programme of study with the participating host organisations.

Questions about skills

Across all questions, participants reported the largest gain when asked about their confidence in presenting thoughts and ideas to others (Q6 - *I feel confident presenting my thoughts and ideas to others*). This considerable gain identifies that summer school programmes greatly supported participants in presenting their work to others as part of the delivered content.

Perhaps as a result of immersive engagement with content, participants also were able to enhance their interactions with peers and others involved with the programme (Q5 - *I feel confident interacting with a wide variety of people*).

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Nexus - University of Leeds, Discovery Way, Leeds, LS2 3AA
david@research-toolkit.co.uk

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Questions about university and careers

Participants reported considerable increases in knowledge of different careers in healthcare by the end of their Summer School experiences (Q14 - *I understand the different careers available in health*). This is testament to the diverse careers-based content delivered by host organisations throughout the programme. Other substantive gains linked were also reported in relation to positive perceptions of university and whether participants would feel comfortable in this environment (Q12 - *I feel comfortable in a university/higher education environment).*

A note on increases

Some areas received small increases by the end of the programme. This could be due to a number of reasons including the fact that the 'score' at the beginning of the Summer School was extremely positive for some elements (which included interest in medicine and healthcare and a recognition of some of the key skills required to be successful in these career areas). Small increases may also be the result of more honest reflection by participants, by the end of the programme, in relation to their drive towards careers in medicine and the assessment of skills and abilities required to pursue such careers.

Inferential statistics

The inferential analysis supported the trends observed in the raw data, depicting a positive shift in students' perceptions of studying medicine following exposure to the summer schools.

Paired-samples t-tests revealed thirteen out of fourteen questions featured statistically significant differences in follow-up scores (relative to baseline) across the 263 students. Additionally, the 'overall' score was also significant indicating that, holistically, the summer school improved students' perceptions of studying medicine in higher education. The significant relationships are reported below (see TABLE 5:). Questions which have a p-value of less than .05 were considered statistically significant.

The largest shifts, reflected by the effect-sizes (see, Cohen's d), were: I feel confident presenting my thoughts and ideas to others; I understand the different careers available in health; I feel confident in applying to medicine; I can work with other people to achieve specific goals.

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Nexus - University of Leeds, Discovery Way, Leeds, LS2 3AA
david@research-toolkit.co.uk

USING THE LEARNING GAIN TOOL TO EXPLORE IMPACT ON THE MSC SUMMER SCHOOLS PROGRAMME 2022

TABLE 1: LEARNING GAIN STATEMENT ANALYSIS - MSC SUMMER SCHOOL PROGRAMME

Learning Gain Tool statements:	Pre	Post	% ⬆⬇
Questions about medicine and healthcare			
1) I will apply to study medicine.	8.79	9.02	⬆3%
2) I will apply to a course in healthcare.	8.54	9.08	⬆6%
3) I feel confident in applying to medicine.	6.92	8.16	⬆18%
4) I understand the importance of communication skills in a healthcare setting.	8.79	9.50	⬆8%
Questions about skills			
5) I feel confident interacting with a wide variety of people.	7.79	8.83	⬆13%
6) I feel confident presenting my thoughts and ideas to others.	7.07	8.56	⬆21%
7) I understand the importance of teamwork in a healthcare setting.	8.97	9.55	⬆6%
8) I can work with other people to achieve specific goals.	8.52	9.25	⬆9%
9) I understand the role of empathy in a healthcare setting.	9.08	9.60	⬆6%
10) I can understand other people's feelings.	8.47	9.06	⬆7%
Questions about university and careers			
11) I know my own strengths and areas I need to develop to ensure I am successful.	7.74	8.84	⬆14%
12) I feel comfortable in a university/higher education environment.	7.78	9.00	⬆16%
13) I think I would succeed at university or other higher education Institution.	8.22	9.01	⬆10%
14) I understand the different careers available in health.	7.59	9.08	⬆20%

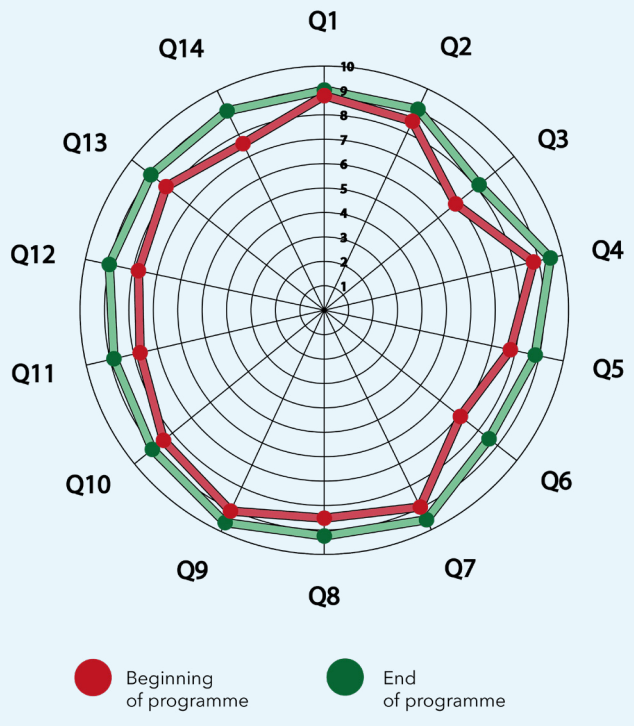

TABLE 2: LEARNING GAIN STATEMENT ANALYSIS - RANKED BY LARGEST GAIN

Learning Gain Tool statements:	Pre	Post	% ⬆⬇
6) I feel confident presenting my thoughts and ideas to others.	7.07	8.56	⬆21%
14) I understand the different careers available in health.	7.59	9.08	⬆20%
3) I feel confident in applying to medicine.	6.92	8.16	⬆18%
12) I feel comfortable in a university/higher education environment.	7.78	9.00	⬆16%
11) I know my own strengths and areas I need to develop to ensure I am successful.	7.74	8.84	⬆14%
5) I feel confident interacting with a wide variety of people.	7.79	8.83	⬆13%
13) I think I would succeed at university or other higher education Institution.	8.22	9.01	⬆10%
8) I can work with other people to achieve specific goals.	8.52	9.25	⬆9%
4) I understand the importance of communication skills in a healthcare setting.	8.79	9.50	⬆8%
10) I can understand other people's feelings.	8.47	9.06	⬆7%
7) I understand the importance of teamwork in a healthcare setting.	8.97	9.55	⬆6%
2) I will apply to a course in healthcare.	8.54	9.08	⬆6%
9) I understand the role of empathy in a healthcare setting.	9.08	9.60	⬆6%
1) I will apply to study medicine.	8.79	9.02	⬆3%

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david@research-toolkit.co.uk

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Learning Gain Tool paired responses:	Number
Anglia Ruskin University	26
HYMS (Hull York Medical School)	43
Imperial College London	35
LMSS (KCL, UCL, St George's, Queen Mary)	50
North West Medical Schools (Lancaster, Liverpool and Edge Hill)	38
University of Exeter	45
University of Leicester	26
TOTAL	263

TABLE 3: LEARNING GAIN RESPONSES BY HOST INSTITUTION

	Anglia Ruskin University			HYMS			Imperial College London			LMSS		
Learning Gain Tool statements:	Pre	Post	% ↑↓	Pre	Post	% ↑↓	Pre	Post	% ↑↓	Pre	Post	% ↑↓
Questions about medicine and healthcare												
1) I have an interest in studying medicine at university.	9.31	9.73	↑5%	8.81	8.65	↓-2%	8.66	8.63	↓-.3%	9.00	9.20	↑2%
2) I have an interest in studying healthcare	9.65	9.92	↑3%	8.44	8.84	↑5%	8.46	8.94	↑6%	8.80	9.16	↑4%
3) I feel confident in applying to medicine.	7.04	8.77	↑25%	7.35	8.58	↑17%	7.40	8.40	↑14%	7.06	7.46	↑6%
4) I understand the importance of communication skills in a healthcare setting.	9.15	9.88	↑8%	8.95	9.51	↑6%	8.91	9.54	↑7%	8.54	9.08	↑6%
Questions about skills												
5) I feel confident interacting with a wide variety of people.	8.42	9.38	↑11%	7.79	8.81	↑13%	8.00	9.00	↑13%	8.02	8.48	↑6%
6) I feel confident presenting my thoughts and ideas to others.	7.69	9.42	↑23%	7.02	8.49	↑21%	7.46	8.71	↑17%	7.18	8.28	↑15%
7) I understand the importance of teamwork in a healthcare setting.	9.46	9.96	↑5%	9.02	9.47	↑5%	8.94	9.60	↑7%	8.80	9.12	↑4%
8) I can work with other people to achieve specific goals.	8.65	9.73	↑12%	8.70	9.12	↑5%	8.69	9.49	↑9%	8.28	8.84	↑7%
9) I understand the role of empathy in a healthcare setting.	9.54	9.88	↑4%	9.23	9.51	↑3%	9.31	9.63	↑3%	8.78	9.24	↑5%
10) I can understand other people's feelings.	9.00	9.42	↑5%	8.51	9.02	↑6%	8.83	9.17	↑4%	8.30	8.70	↑5%
Questions about university and careers												
11) I know my own strengths and areas I need to develop to ensure I am successful.	8.35	9.31	↑12%	8.23	8.98	↑9%	7.86	9.06	↑15%	7.48	8.48	↑13%
12) I feel comfortable in a physical or virtual university environment.	7.96	9.58	↑20%	8.47	9.19	↑9%	8.09	9.00	↑11%	8.04	8.68	↑8%
13) I think I would succeed at University.	8.27	9.69	↑17%	8.86	9.14	↑3%	8.49	9.00	↑6%	8.16	8.74	↑7%
14) I understand the different careers available in health.	7.65	9.58	↑25%	7.95	9.44	↑19%	7.94	9.40	↑18%	7.64	8.54	↑12%

TABLE 4: LEARNING GAIN COMPARISON BY HOST INSTITUTION

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david@research-toolkit.co.uk

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	North West Medical Schools			University of Exeter			University of Leicester		
Learning Gain Tool statements:	Pre	Post	% ↑↓	Pre	Post	% ↑↓	Pre	Post	% ↑↓
Questions about medicine and healthcare									
1) I have an interest in studying medicine at university.	9.37	9.47	↑1%	7.93	8.93	↑13%	8.69	8.58	↓-1%
2) I have an interest in studying healthcare	9.11	9.21	↑1%	7.20	8.69	↑21%	8.69	9.12	↑5%
3) I feel confident in applying to medicine.	7.11	8.26	↑16%	5.82	8.18	↑40%	6.85	7.73	↑13%
4) I understand the importance of communication skills in a healthcare setting.	9.08	9.50	↑5%	8.20	9.78	↑19%	9.12	9.38	↑3%
Questions about skills									
5) I feel confident interacting with a wide variety of people.	8.29	8.66	↑4%	6.62	8.91	↑35%	7.77	8.85	↑14%
6) I feel confident presenting my thoughts and ideas to others.	7.55	8.08	↑7%	5.80	8.62	↑49%	7.31	8.69	↑19%
7) I understand the importance of teamwork in a healthcare setting.	9.21	9.68	↑5%	8.47	9.62	↑14%	9.31	9.73	↑5%
8) I can work with other people to achieve specific goals.	9.05	9.42	↑4%	7.73	9.22	↑19%	8.88	9.31	↑5%
9) I understand the role of empathy in a healthcare setting.	9.16	9.66	↑5%	8.64	9.78	↑13%	9.23	9.69	↑5%
10) I can understand other people's feelings.	8.74	9.18	↑5%	7.93	9.22	↑16%	8.23	8.88	↑8%
Questions about university and careers									
11) I know my own strengths and areas I need to develop to ensure I am successful.	8.11	8.95	↑10%	6.56	8.58	↑31%	8.15	8.85	↑8%
12) I feel comfortable in a physical or virtual university environment.	7.97	8.95	↑12%	6.27	8.76	↑40%	7.92	9.27	↑17%
13) I think I would succeed at University.	8.58	9.08	↑6%	7.04	8.71	↑24%	8.38	9.04	↑8%
14) I understand the different careers available in health.	8.03	8.97	↑12%	6.29	8.69	↑38%	7.92	9.38	↑18%

TABLE 4: LEARNING GAIN COMPARISON BY HOST INSTITUTION (CONTINUED)

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USING THE LEARNING GAIN TOOL TO EXPLORE IMPACT ON THE MSC SUMMER SCHOOLS PROGRAMME 2022

	t	df	p	Cohen's d
Questions about medicine and healthcare				
1) I have an interest in studying medicine at university.	-1.420	262	.157	0.088
2) I have an interest in studying healthcare	-3.113	262	.002	0.192
3) I feel confident in applying to medicine.	-7.682	262	< .001	0.474
4) I understand the importance of communication skills in a healthcare setting.	-5.606	262	< .001	0.346
Questions about skills				
5) I feel confident interacting with a wide variety of people.	-6.976	262	< .001	0.430
6) I feel confident presenting my thoughts and ideas to others.	-9.708	262	< .001	0.599
7) I understand the importance of teamwork in a healthcare setting.	-4.578	262	< .001	0.282
8) I can work with other people to achieve specific goals.	-5.475	262	< .001	0.338
9) I understand the role of empathy in a healthcare setting.	-4.291	262	< .001	0.265
10) I can understand other people's feelings.	-4.210	262	< .001	0.260
Questions about university and careers				
11) I know my own strengths and areas I need to develop to ensure I am successful.	-7.681	262	< .001	0.474
12) I feel comfortable in a physical or virtual university environment.	-7.987	262	< .001	0.492
13) I think I would succeed at University.	-5.224	262	< .001	0.322
14) I understand the different careers available in health.	-9.856	262	< .001	0.608

TABLE 5: PAIRED SAMPLE T-TESTS

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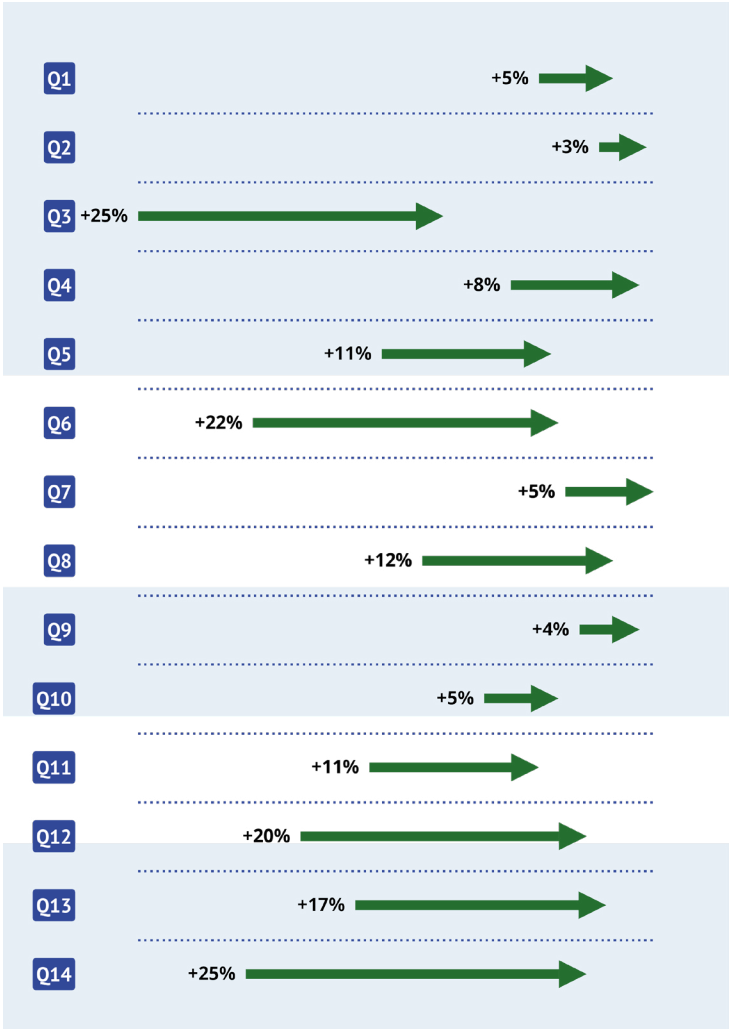
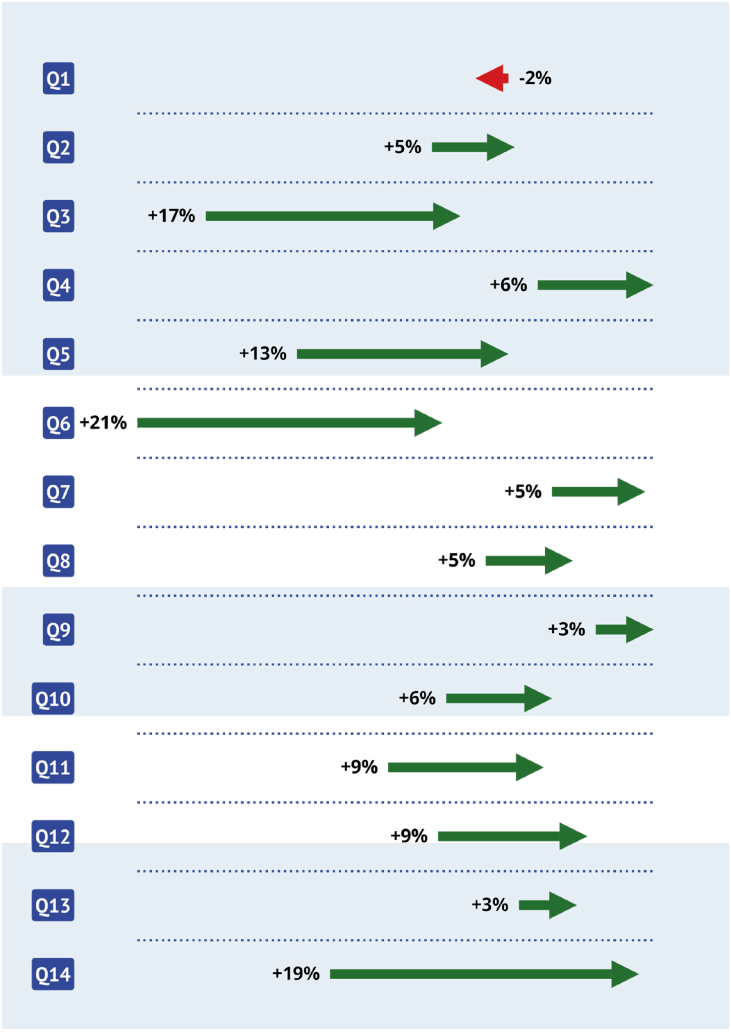


ANGLIA RUSKIN UNIVERSITY



HYMS (HULL YORK MEDICAL SCHOOL)

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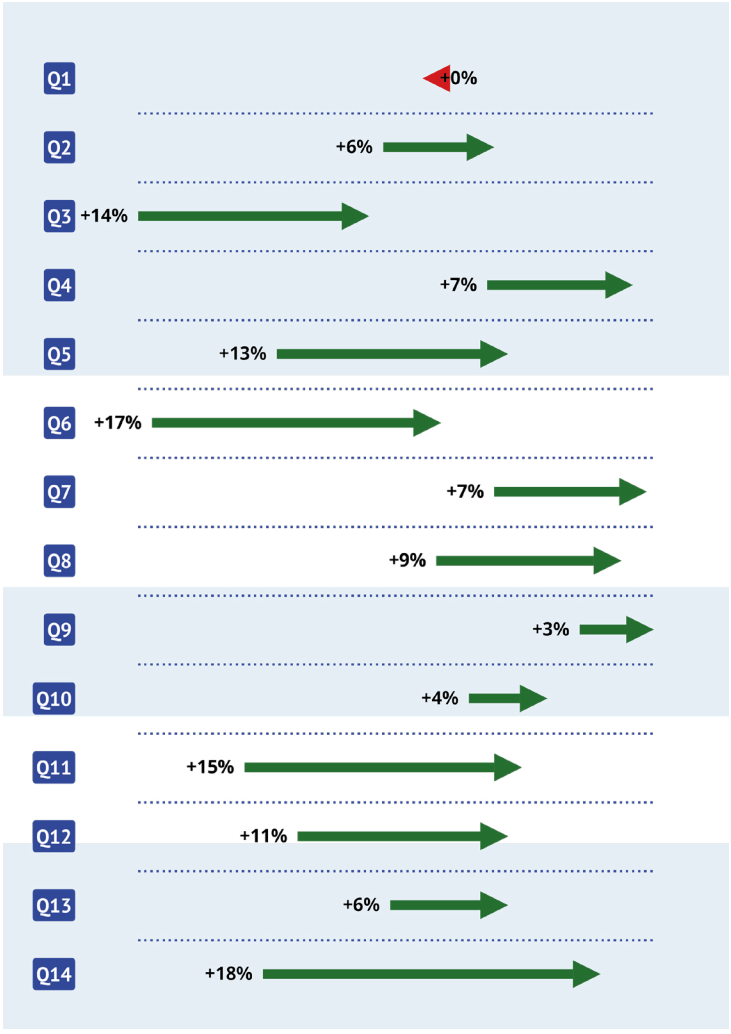
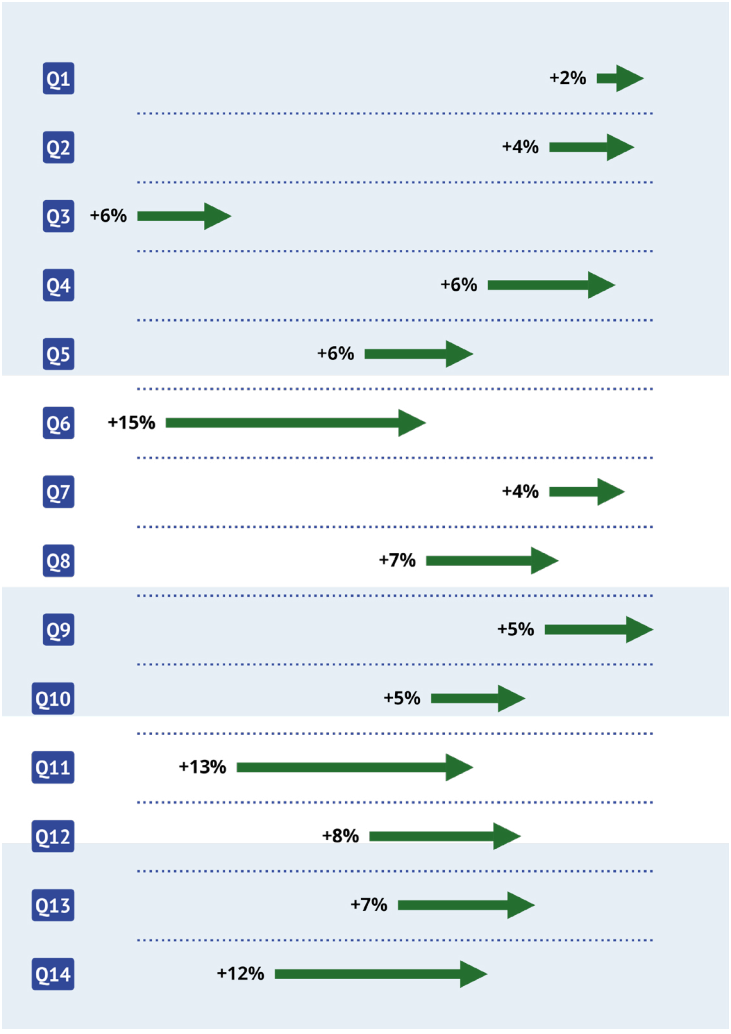


IMPERIAL COLLEGE LONDON



LMSS (KCL, UCL, ST GEORGE'S, QUEEN MARY)

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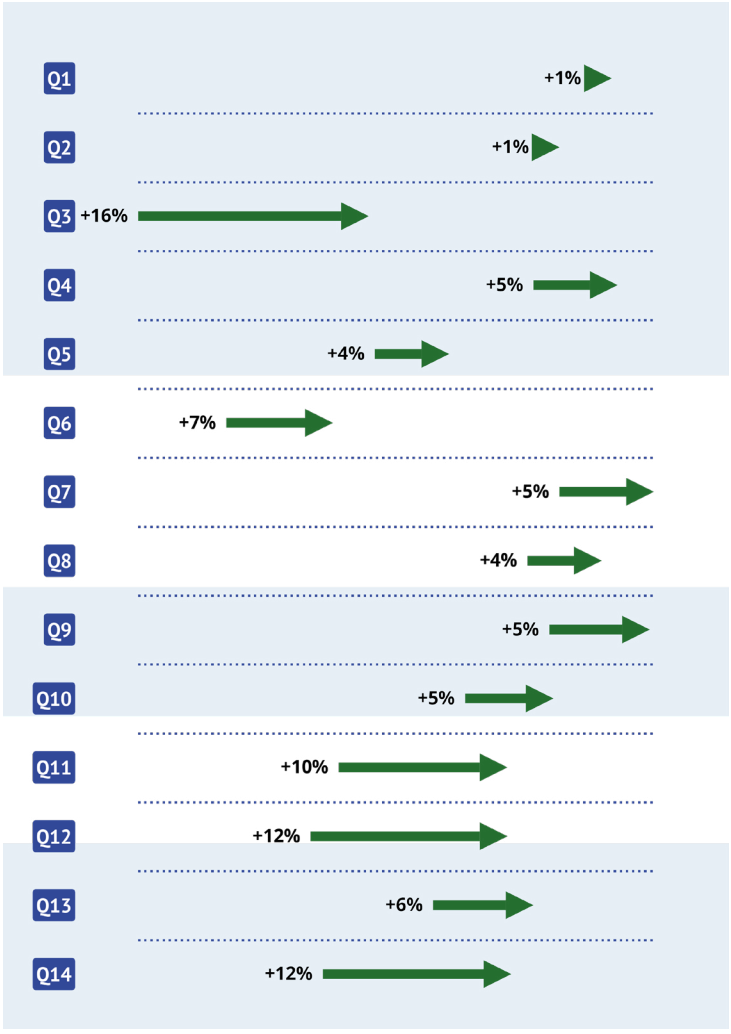
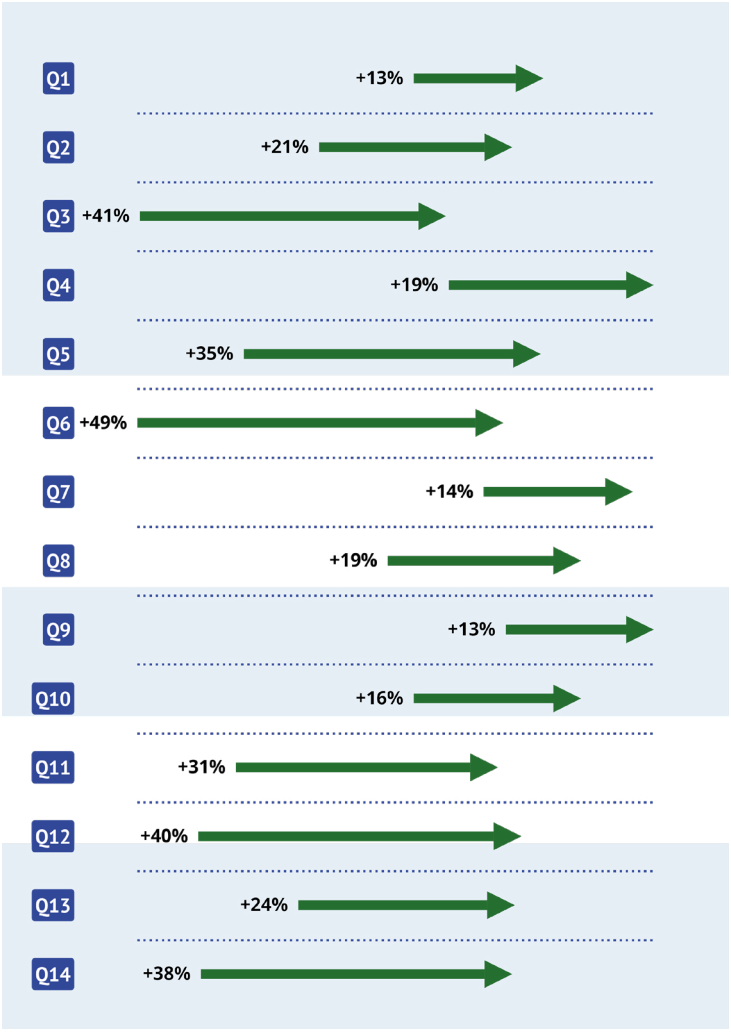


NORTH WEST MEDICAL SCHOOLS



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david@research-toolkit.co.uk

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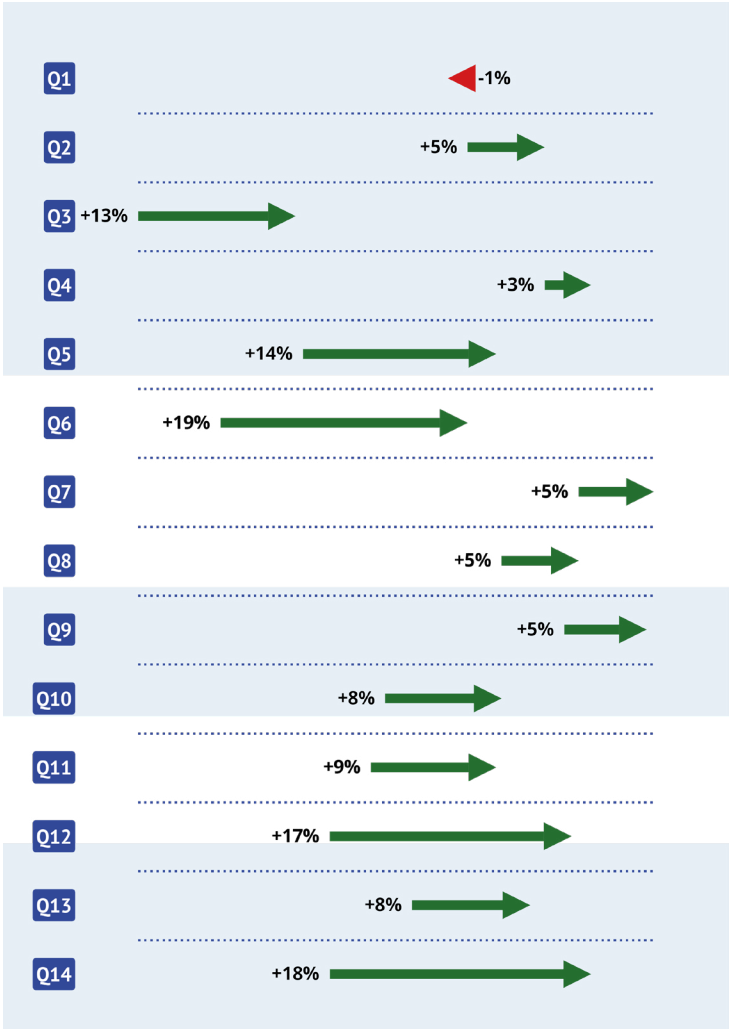

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Research Toolkit Limited
Nexus - University of Leeds, Discovery Way, Leeds, LS2 3AA
david@research-toolkit.co.uk

Interviews

Main findings

- The summer schools were largely beneficial to the participants, as it helped them feel part of a community, helped them understand how medical school works and increased their confidence in their application and going to medical school.
- A sense of community emerged from all of the summer schools. This sense of community with people from similar backgrounds with the same goals and with student mentors is paramount, as they can learn from each other, encourage each other and inspire each other.
- Participants felt more confident in their applications after the summer school. They heard others' experiences, participated in activity and also gained confidence from gaining a new sense of identity and community in medical school settings, with students feeling more at home in medical environments.
- There still remained concerns following the summer schools for some participants, for example financing their studies and workload.
- Residential summer schools appear to have helped participants develop a sense of identity related to the medical field, it helped them to see themselves as medical students and help them to not feel out of place in these environments.
- The residential summer schools helped to demystify higher education and made the concept of university and medicine more understandable and less elusive to the participants.
- In the online summer schools there was social connectedness (the experience of being able to communicate and familiarise themselves with people from similar backgrounds, in similar situations) in different locations all at once. This connection allowed a sense of community to be felt between participants and were able to form friendships and learn from each other.
- The online summer schools demystified medicine - understanding more about medical school life, admissions and career.
- Participants liked that it was not just medicine but included allied health professions, and the patient engagement.
- Food options were not inclusive within all residential summer schools.

Recommendations

- Continue implementing activities allowing students to interact with patients or role-play patients
- Ensure food provided in residential summer schools is inclusive for students who need their food to be halal, vegan, kosher etc.
- Implement more sessions that give students individualised application guidance
- Implement sessions that inform students of potential financial help available for them

This section is authored by Daniel Jackson, a medical student at the University of Southampton.

Participants' experiences of the MSC Summer Schools

Introduction and aims

This report presents the participants' experiences of the MSC Summer Schools delivered in 2022. The primary aim of this exploratory project was to evaluate the impact of the summer schools on the participants who attended. This report will also explore the differences between participants' experiences of online and in-person summer schools exploring the summer schools' impact on their understanding of medical school and the impact on their confidence in going to university.

Method

This is a qualitative exploratory study using semi-structured interviews. The participants were all students who had attended at least one MSC Summer School in 2022; the list of 115 participants list was provided by the summer school organiser.

An email with participation details and a consent form was sent out to all students on the list provided. The students who responded and wished to participate attended online Teams interviews aimed to last 20 – 30 minutes. The interviews were recorded, and externally transcribed; this transcription was funded by the MSC. After receiving the transcriptions the researcher familiarised themselves with the data and thematic analysis was carried out, as per Braun and Clarke. The thematic analysis was carried out with in-person and online participants' interviews coded separately. Research group meetings were held to assist with data analysis and NVIVO software was used. Ethical approval for this project was granted by the University of Southampton Faculty of Medicine Ethics Committee (ERGO number: 60516.A4).

Results

Of the 115 participants contacted, 17 agreed to be interviewed. Of that 17, 10 attended only in-person summer schools, 5 attended only online summer schools and 2 attended both. All interviews were conducted online and for simplicity participants will be referred to as 'in-person' or 'online'. The figures and tables below are summaries of the themes and key quotes from interviews with the participants. As aforementioned in-person and online participants were treated as two separate datasets, producing similar but different themes and quotes.

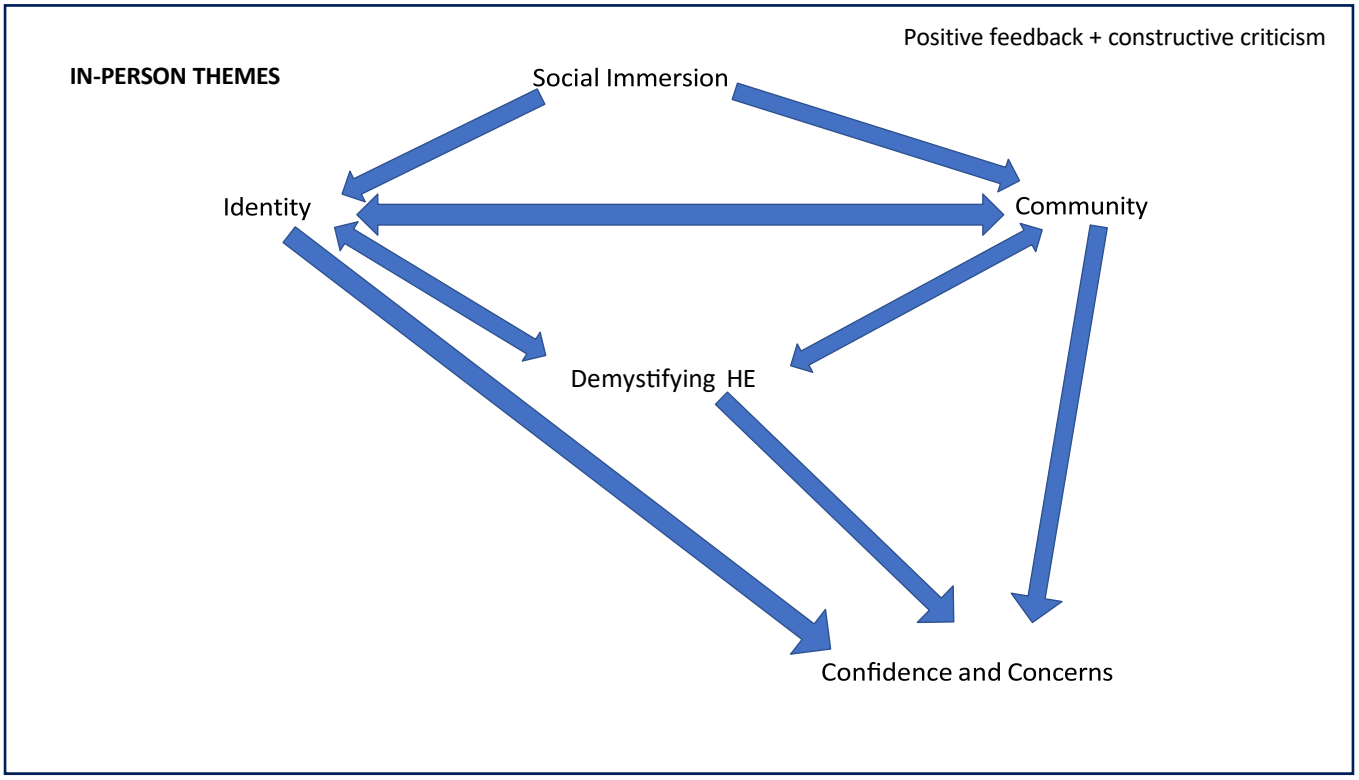

Figure 2: Representation of In-person themes
HE = Higher Education

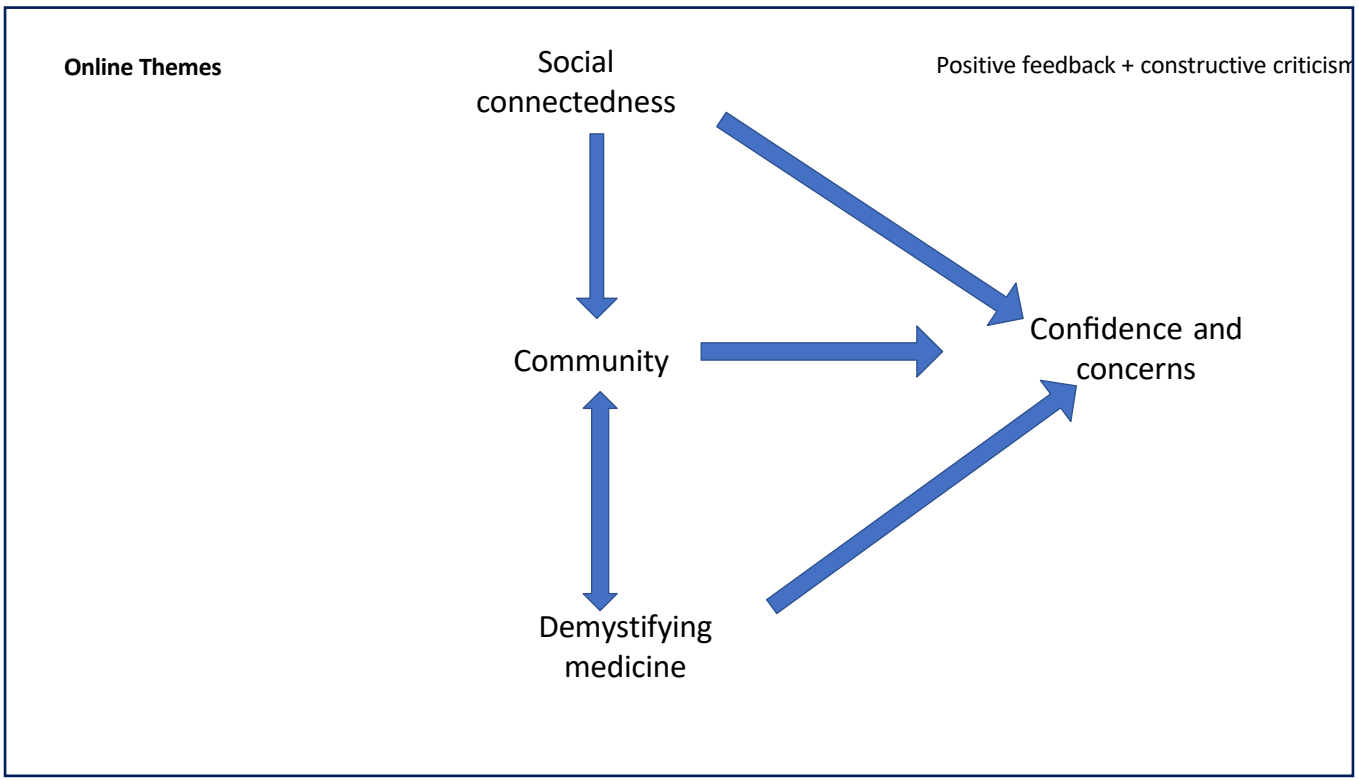

Figure 3: Representation of Online themes

Theme	Quote
Social Connectedness	“it was with loads of other people who were in the same position as me, and like they were just like reassuring”
Community	“I am quite worried about the people that might do Medicine, I might not fit in with, and there was a stigma, but like talking to the people that were on it, and some of them are doing gap years as well, it made it a lot more sort of relatable, and so, I did a U-turn and changed my mind a bit. So, it was really helpful”
Demystifying medicine	“they just explained the whole process in a way that made it seem not as scary as some other people say, because some other people always like talk about how Medicine is very difficult to get into, only the best people can get in, you know it’s rare sometimes, but they just made it seem more like realistic to achieve that goal”
Confidence	“I was going to apply before, but I think it has made me more confident to apply, because I was actually having doubts at some point, but I think it has made me feel like Medicine is definitely an achievable goal”
Concerns	“it’s like I’m prepared to take on the workload, but I’m not really prepared to live university life at Medical School”

Table 15: Online themes and quotes

Theme	Quote
Social Immersion	“I think that was like a great, really bonding experience, because we didn’t know each other, and I actually made friends, and I think we encouraged each other on this medical journey,”
Identity	“I definitely feel more confident, as I met quite a lot of people there with similar interests and ideas on Medicine, so, it has sort of made me feel more at home in a way, so, I feel more confident in going to a university and experiencing life there.”
Community	“I felt like in a community of like certain people who wanted to be, you know like going down the same career path as me, or possibly had the same thoughts, passions, and fears as me.”
Demystifying higher education	“it really gave a feel of what the atmosphere would be like if we took Medicine and worked in a hospital.”
Confidence	“I learnt that I could manage outside of the home setting. I could be able to easily make new friends, and that my confidence for getting into Medical School increased”
Concerns	“It kind of inspired me to have like an aspiration to go to university as a goal, but at the same time just to also look, but worried about finances. You know I think that’s pretty much all the fears that I have. If finance weren’t an issue, I probably would have been more confident about going to university”

Table 16: In person themes and quotes

The way these themes interlink is shown in figures 1 and 2; although these themes are separately defined, they are all connected and feed into each other. When looking at the in-person themes, demystifying higher education helps develop an identity and sense of community; this was inferred from the participants feeling more at home in the summer school as a result of understanding the process better and seeing people in similar situation as them striving for the same goal. Then all these themes increase confidence as the participants understood the medical life, the medical student life and the application process better. Additionally, the sense of belonging created by meeting likeminded individuals and hearing first hand stories from student mentors also boosted confidence. When comparing this to the online themes, gaining a sense of identity wasn't mentioned, however the participants still benefited from being able to interact with other participants and feel part of a community. Online summer school participants also didn't appear to gain the same whole rounded demystification of higher education; despite this, the participants enjoyed it and learned more about medical school and increased their confidence.

Common themes

A sense of community emerged from both styles of summer school. This theme is important for participants of this demographic, because they don't usually go to a school that has many students aspiring to do medicine, and those who did try it is "not something they'd really talk about, because they also hadn't had like a brilliant experience with it". This sense of community with people from similar backgrounds with the same goals and with student mentors is paramount, as they can learn from each other, encourage each other and inspire each other. Some participants even found "the people more influential than the summer school" as they were able to

> *"compare yourself and see where you stand amongst a group of people really helped as well. Because most of the tips and tricks that I took were from the people I was in my group with, and the students, rather than the big summer school lectures."*

Confidence was a key theme for many participants with lots of factors playing into it. Participants felt more confident in their applications after the summer school with a participant saying

> *"I did worry a lot about my application, and my personal statement and my work experience, etcetera. I think after the Summer School I've kind of like, I don't know, it's just made me a bit more comfortable with my application, and I've like accepted that I've submitted to them and I'm like more confident that I'll be able to get at least an interview or something."*

Statements like that are why these summer schools are organised and that is still only one dimension of the confidence gained. Another way confidence was gained was through hearing others' experiences and seeing "that people were doing sort of gap years and Graduate Entry, and then it gave me a lot more confidence". Some activities also single-handedly improved confidence, with one student saying, "one thing that really stood out was the mock interview practising, so now I am more confident about going for a medical, if I get accepted into any university, I'm actually more confident about the interview, so, I feel like that was really helpful". Confidence was also gained from developing a new sense of identity and community in medical school settings, with students feeling more at home in medical environments.

The summer schools were able to give students a realistic perspective of medical school life and this was largely beneficial however participants still had concerns after attending the summer school. As seen in table 1 the workload was a concern for one participant; identifying this before applying or entering medical school is good as it can save that participant going through the stressful ordeal of applying and going through medical school if they cannot handle it. Another concern that was more worrying is shown in table 2, this participant was concerned about financing university, and after attending this summer school she had no further clarification or understanding on how the student loan system worked, nor how students financially cope in medical school. Admittedly, this concern isn't representative of the whole cohort, however it is an important concern especially as this outreach programme is aimed at a lower socio-economic status population for whom finances are going to a bigger concern and students need all the information about how the loans work, the bursaries available and other financial advice.

In-person themes

Social immersion refers to the deep levels of bonding between participants, mentors and organisers. Due to this intimate social connection being a main theme for these participants, a reason for this deeper engagement is likely a result of being in the same enclosed environment for the duration of the summer school. The participants all seemed to value this and some mentioned making friends they still talked to months after. This social environment appears to help the participants develop a sense of identity related to the medical field, it helped them to see themselves as medical students and help them to not feel out of place in these environments and made them "consider the whole medical application in a more personal" way. This sense of identity is very important as it can prevent future issues like imposter syndrome as they feel like they deserve and belong in the environment.

Demystifying higher education refers to the concept of university and medicine becoming more understandable and less elusive to the participants. The residential allowed students to simulate living away from home without their "parents there it was

quite good to kind of see what it would be like". They also physically experienced day to day life as a medical student and carried out activities medical students would do and having lectures allowing them to clearly picture medical school and their potential future careers as doctors. This is important as after this they can make an informed decision on whether it is for them.

Online themes

Social connectedness refers to the experience of being able to communicate and familiarise themselves with people from similar backgrounds, in similar situations in different locations all at once. This connection allowed a sense of community to be felt between participants as despite not being physically with each other they still virtually experience summer school together and were able to form friendships and learn from each other.

Demystifying medicine was the process of understanding more about medical school life, admissions and career. Participants learned from lectures, mentors and even hearing anecdotal stories about how "people came in with different aspirations and different people went through different pathways to get to a similar point". This theme is important as a key goal of medical school summer school is for attendees to better understand medicine and what it takes to become a doctor.

Positive feedback and constructive criticism

When having the interviews of both these styles positive feedback and constructive criticism of the summer schools was mentioned. When looking at the in-person summer schools, participants liked that it wasn't "just Medicine, so the Allied Health bit was if you wanted to go into Nursing or something else", they also enjoyed "patient consults, because it gave us an opportunity to kind of build confidence".

With the in person participants there was a fair amount of constructive criticism. The first was that there were no halal food options and Muslim participants found it "just scary to be put into that situation". The second was travelling to the residential summer school, with one participant getting a train for "six hours, there and back"; they also had to pay £200 to travel. The third was the lack of in-depth application help, however this feedback was somewhat inconsistent, as some participants received personal statement help and how to strategically apply, but several other participants thought the lectures on the medical application process were too generic and they left "not entirely sure how much work experience you need to do, if you need for Medicine application". Another area of improvement could be ethnic diversity one student said "I think there needs to be more diversity, because at first it was really off-putting'.

There was a great deal of positive feedback for the online summers school with participants saying what they “enjoyed the most was the patient consultation”, this participant in particular enjoyed the idea of being “able to act as doctors with a patient”. The participants enjoyed that they “didn’t need to travel for it and that it was in the “comfort of your own home”. An issue the participants had was connectivity issues with their “student ambassadors, they would like go off of line”. Another issue one participant had was that the timing of the summer school was in the last week of school so they had to “have it playing in the lesson sometimes, or I would just leave the lesson, to learn like a lab room”. An additional key issue was similar to the in- person issue with participants wanting the summer school to dive “deeper into specific parts of the admissions process”. Other issues lay with reduced desire to socially connect with each other during group work, with “No-one really wanted to speak, no-one was interacting, and it just became a chore”

Conclusion

In conclusion the impact of the Medical Schools Council Summer School was largely beneficial to the participants, with it helping them feel like part of a community, helping them understand how medical school works and increasing their confidence in their application and going to medical school. The key differences between in- person and online summer schools were in-person gave participants the ability to physically engage with other participants, and experience a sample of university life, and the online delivery allowed students to connect from anywhere without the hassle of travel and food. The summer schools allowed students to develop their understanding of medicine through patient interaction, learning from mentors and having lectures about the application process. The summer schools increased confidence in going to university in many aspects with participants feeling more confident in their application and medical school, and in-person participants also feeling more prepared for university. One area further research could focus on is having earlier methods of outreach to target students at younger ages. Another area further research could focus on are the most beneficial activities and individualised application guidance.

Recommendations

- Continue Implementing activities allowing students to interact with patients/ role play patients
- Ensure food provided in residential summer schools is inclusive for students who need their food to be halal, vegan, kosher etc
- Implement more sessions that give students individualised application guidance
- Implement sessions that inform students of potential financial help available for them.