

Access to UWE Bristol Summer School Interim Report

Bek Rengel – Data and Evaluation Officer, EDI Team. November 2024.

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Background

As part of our 2024/25-2027/28 Access and Participation Plan, we are evaluating the Summer School for contextual offer holders (COH). This forms part of Intervention Strategy 1: Widening Access and Raising Attainment, with the objective of reducing the gap in access between students from IMD Q5 and IMD Q1.

COH are given the opportunity to attend a Summer School which takes place across 3 days on Frenchay campus and gives COH the chance to experience university life before results day: staying in UWE accommodation, attending talks and workshops, and building social networks. The Summer School forms part of a larger package of support for COH which includes comms, webinars and preparing for HE talks.

The pre and post Summer School surveys form part of the larger evaluation plan for this intervention. In these surveys, we are evaluating the impact of the Summer School on participants' university preparedness (defined as academic self-efficacy), sense of belonging, knowledge and confidence in utilising UWE support services, and knowledge of managing finances as a student.

Method

In August 2024, participants took part in two surveys, which consisted of the same questions: TASO academic self-efficacy scale, TASO sense of belonging scale, and a Widening Access (WA) Team internally developed knowledge and confidence scale.

COH attending the Summer School formed the intervention group (IG). Taking place from 5th-8th August, IG took part in a pre-Summer School survey on the first day and a post-Summer School survey on the last day.

A comparison group (CG) was constructed of COH who joined the WA Team mailing list but were not attending the Summer School. An initial survey (pre) was sent out to all mailing list members (562 COH) in the week prior to the Summer School (29th Jun-5th Aug). All those who completed the pre survey were emailed a second survey (post) in the week after the Summer School (8th-15th Aug) of which the first 50 responses were taken for analysis.

For both groups, only the responses of those who had filled in both pre and post survey were taken for analysis. We also calculated a difference score ($\text{Diff} = \text{Post} - \text{Pre}$) which was used in some parts of the analysis.

We ran tests focused on the following evaluation questions:

1. To what extent is there a difference in academic self-efficacy, sense of belonging and knowledge and confidence before and after attending the Summer School?
 - Wilcoxon signed rank test comparing pre and post scores for each group
2. To what extent is there a difference between attendees' and non-attendees' scores for each of the questions and for each stage (pre, post, diff)?
 - Mann Whitney U test comparing IG scores and CG scores

3. Is there any difference between demographic groups' diff scores? If so, which demographic groups and which study groups (IG or CG)?
 - Mann Whitney U tests or Kruskal Wallis tests depending on groups being tested (e.g. comparing the responses of disabled participants and non-disabled participants in IG: Mann Whitney U; comparing the responses of White, Asian, Black and Multiple Heritage participants in CG: Kruskal Wallis)

Executive Summary of Key Findings

Summary of Abbreviations

- COH: contextual offer holders
- IG: intervention group i.e. Summer School attendees
- CG: comparison group i.e. COH who did not attend Summer School

Our analysis found that IG showed a **statistically significant improvement in sense of belonging and knowledge and confidence** at the end of the Summer School compared to the start, with **medium to very large effect sizes** across these two areas. This suggests that attendance at the Summer School is associated with significant, relatively large, short-term improvements in attendees' prospective sense of belonging and knowledge and confidence.

On average, IG participants came to the Summer School with **lower mean pre scores across all scales** compared to CG, with a **significant difference to CG in their confidence that they could manage university-level study**. This could suggest that lower academic self-efficacy is a potential reason for COH to self-select to attend the Summer School.

IG participants were more confident than CG in their ability to achieve the grades required for university admission, while CG participants felt more confident in managing university-level study. This suggests that **academic self-efficacy, particularly regarding exam results and study management, may influence COH's decision to attend the Summer School**.

Demographic analyses were also run to determine if there were any significant differences between and within demographic groups. Although variations were observed, there were few significant differences, and these were severely limited by very small sample sizes. However, it is interesting to note that both **IG and CG were overrepresented for disability, IMD Q1/IMD Q2, women and Global Majority** compared to overall UWE data.

Next Steps

- We will be continuing this work, running a difference-in-difference analysis to examine any potential causal effect of the Summer School.
- A follow-up survey and focus groups are taking place in November 2024, with analysis of these taking place in 2025.

- At the end of 2024/25 and start of 2025/26, we will examine the academic outcomes (continuation and module marks) for all study participants who accepted their offer and came to UWE to determine if there are any longer-term impacts associated with attendance/non-attendance at the Summer School.

Respondents and Demographics

Participants had to complete both a pre and post survey for their response to be counted in the analysis. 27 Summer School attendees completed the pre survey and 22 completed both pre and post surveys. Of the 562 COH who were emailed the pre survey, 61 completed the survey and these 61 COH were subsequently emailed the post survey. The first 50 responses for the post survey were taken for analysis.

Table 1

Total number of valid responses for IG and CG

IG	CG
22	50

Majority of respondents across both IG and CG were:

- under 21 years old (not mature students)
- not from IMD Q1 or IMD Q2
- women
- declared a disability
- White
- have at least one parent, guardian or primary caregiver who has a HE qualification
- attended a state-run/state-funded school.

Compared to the most recently available UWE applicant demographics (September entry, new participants, not Clearing) for 2023/24, both IG and CG were overrepresented for IMD Q1/IMD Q2, women, disability and Global Majority compared to the general UWE applicant population.

Since disability, ethnicity and home postcode are factors that influence eligibility for a contextual offer, they may partially explain the overrepresentation in these areas, though they might not be the only contributing factors.

Table 2

Demographic breakdown of IG and CG showing number and percentage and UWE totals

Group	IG		CG		UWE
	<i>n</i> *	%	<i>n</i> *	%	% 23/24

Age				
Young	70.6	79.5	85.0	
Mature	29.4	20.5	15.0	
IMD				
IMD Q1 - 2	35.7	36.4	30.0	
IMD Q3 -5	64.3	63.6	70.0	
Gender				
Woman	70.0	63.3	56.0	
Man	20.0	28.6	44.0	
Non-Binary & Other	10.0	8.2	No data	
Disabled status				
Non-disabled	35.3	38.5	74.0	
Disabled	64.7	61.5	26.0	
Disability Type ^a				
Not disabled	23.1	38.5	74.0	
SpLD	15.4	12.8	8.0	
MH condition	23.1	28.2	9.0	
Physical impairment	3.8	10.3		
Long-term ill/health	11.5	12.8	3.0	
Neurodiversity	23.1	28.2	2.0	
Other		2.6	1.0	
Ethnicity				
White	73.7	72.0	77.0	
Asian or Asian British	5.3	14.0	7.0	
Black or Black British	21.1	8.0	7.0	
Multiple Heritage		6.0	7.0	
Other			2.0	
Ethnicity Grouping				
White	73.7	72.0	77.0	
Global Majority	26.3	28.0	23.0	
Parents' HE qualification				
Parent/s have HE qualification	65.0	47.9	No data	
Parent/s don't have HE qualification	35.0	52.1	No data	
School type				
State school	76.5	93.6	No data	
Independent/Fee paying	5.9	4.3	No data	
Other	17.6	2.1	No data	

Note. Respondents were able to opt-out of giving demographic information, and these have been removed from the numbers* and percentages presented in Table 2. *Numbers have been redacted for external publication to preserve anonymity.

^a Some participants declared more than one disability type, so totals exceed the total number of valid respondents for each study group

Detailed Findings

Evaluation Question 1

To what extent is there a difference in academic self-efficacy, sense of belonging and knowledge and confidence before and after attending the Summer School?

Tests were run to determine if there was a significant difference between pre and post scores for each question and for each of the two study groups. We conducted these tests to understand what differences are present before and after attending the Summer School.

There is a statistically significant difference between pre and post scores for IG for all sense of belonging and knowledge and confidence questions, with medium, large or very large effect sizes observed for all these questions (Table 3). Knowledge of support available at university ($z = 3.981, p < .001, r = .849$, Wilcoxon Signed Rank Test) and knowledge of how to access support at university ($z = 3.531, p < .001, r = .753$, Wilcoxon Signed Rank Test) both showed large or very large, significant improvements after attendance at the Summer School. IG also saw large, significant improvements in academic sense of belonging ($z = 2.500, p = .012, r = .533$, Wilcoxon Signed Rank Test), confidence in managing finances ($z = 2.919, p = .004, r = .622$, Wilcoxon Signed Rank Test), and ability to navigate student life ($z = 2.701, p = .007, r = .576$, Wilcoxon Signed Rank Test). Slightly smaller but still significant improvements were observed in IG participants' perception that university is for people like them ($z = 1.968, p = .049, r = .420$, Wilcoxon Signed Rank Test) and their social sense of belonging ($z = 2.235, p = .025, r = .477$, Wilcoxon Signed Rank Test). All this suggests that attendance at the Summer School is associated with significant improvements in prospective sense of belonging, knowledge of support, confidence managing money and perceived ability to navigate student life. **Thus, Summer School attendance appears to have a significantly large positive impact on COH who attend.**

There were no statistically significant differences observed between pre and post scores for academic self-efficacy questions in IG, and no significant differences observed for CG. This was expected as CG did not receive any intervention between the pre and post surveys.

On average across all scales, IG showed greater increases in pre to post scores compared to CG. The largest improvements were observed in the knowledge and confidence questions. IG scores increased by more than one scale point on average for knowledge of support available ($M = 1.18, 95\% CI [.86, 1.51]$) and by one scale point on average for knowledge of how to access support ($M = 1.00, 95\% CI [.59, 1.41]$). **This suggests that COH attending the Summer School could expect to see approximately one scale point improvement (e.g. moving from neutral to agree) for their knowledge of support and knowledge of how to access support at university.**

Table 3

Wilcoxon Signed Rank Test comparing pre and post scores for each question for IG and comparing pre and post scores for each question for CG

Question	Intervention Group (IG)					Comparison Group (CG)				
	<i>z</i>	<i>p</i>	<i>r</i>	Significant	Effect size	<i>z</i>	<i>p</i>	<i>r</i>	Significant	Effect size
TASO Academic Self-Efficacy Scale										
I am confident that I can get the exam results required to progress to university.	-1.265	.206	-.270	No	Small	-1.324	.185	-.187	No	Small
I have the academic ability to do well at university.	.432	.666	.092	No	Very small / no effect	.333	.739	.047	No	Very small / no effect
I could manage with the level of study required at university.	1.658	.097	.354	No	Medium	-.943	.346	-.133	No	Small
TASO Sense of Belonging Scale										
University is for people like me.	1.968	.049	.420	Yes	Medium	1.188	.235	.168	No	Small
I would fit in well academically with others at university.	2.500	.012	.533	Yes	Large	.728	.467	.103	No	Small
I would fit in well socially with others at university.	2.235	.025	.477	Yes	Medium	.699	.485	.099	No	Very small / no effect
WA Team Knowledge and Confidence Scale										
I am confident about how to manage money and finances as a student.	2.919	.004	.622	Yes	Large	1.548	.122	.219	No	Small
I know what support is available at university.	3.981	<.001	.849	Yes	Very large	.137	.891	.019	No	Very small / no effect
I know how to access support available at university.	3.531	<.001	.753	Yes	Large	1.237	.216	.175	No	Small
I have the skills and abilities to navigate student life whilst studying.	2.701	.007	.576	Yes	Large	1.198	.231	.169	No	Small

Table 4.

Summary of mean (M) and 95% confidence intervals (CI) for pre, post and diff scores for each question. IG and CG are both shown below and red shading in the IG column indicates where a mean is lower than CG, green shading where a mean is higher than CG

Question	Stage	M	IG		M	CG	
			95% CI			95% CI	
			LL	UL		LL	UL
Overall							
Overall mean TASO Academic Self-Efficacy scores	PRE	4.00	3.75	4.25	4.09	3.95	4.23
	POST	4.03	3.62	4.44	4.02	3.86	4.18
	DIFF	0.03	-0.34	0.40	-0.07	-0.19	0.05
Overall mean TASO Sense of Belonging scores	PRE	3.73	3.42	4.04	3.76	3.58	3.94
	POST	4.18	3.95	4.41	3.85	3.66	4.05
	DIFF	0.45	0.14	0.77	0.09	-0.05	0.24
Overall mean WA Team Knowledge and Confidence scores	PRE	3.26	2.95	3.57	3.52	3.34	3.70
	POST	4.14	3.94	4.33	3.64	3.43	3.85
	DIFF	0.88	0.59	1.16	0.12	-0.04	0.28
TASO Academic Self-Efficacy Scale							
I am confident that I can get the exam results required to progress to university.	PRE	4.45	4.10	4.81	3.96	3.72	4.20
	POST	4.18	3.68	4.69	3.80	3.53	4.07
	DIFF	-0.27	-0.71	0.16	-0.16	-0.41	0.09
I have the academic ability to do well at university.	PRE	4.00	3.69	4.31	4.22	4.04	4.40
	POST	4.05	3.65	4.44	4.24	4.04	4.44
	DIFF	0.05	-0.40	0.49	0.02	-0.10	0.14
I could manage with the level of study required at university.	PRE	3.55	3.19	3.90	4.10	3.96	4.24
	POST	3.86	3.45	4.28	4.02	3.82	4.22
	DIFF	0.32	-0.05	0.69	-0.08	-0.25	0.09
TASO Sense of Belonging Scale							
University is for people like me.	PRE	3.91	3.52	4.29	3.76	3.51	4.01
	POST	4.32	4.07	4.57	3.88	3.63	4.13
	DIFF	0.41	0.01	0.81	0.12	-0.08	0.32
I would fit in well academically with others at university.	PRE	3.73	3.36	4.09	3.82	3.62	4.02
	POST	4.18	3.89	4.48	3.88	3.68	4.08

I would fit in well socially with others at university.	DIFF	0.45	0.13	0.78	0.06	-0.11	0.23
	PRE	3.55	3.12	3.97	3.70	3.45	3.95
	POST	4.05	3.67	4.42	3.80	3.55	4.05
	DIFF	0.50	0.07	0.93	0.10	-0.17	0.37
WA Team Knowledge and Confidence Scale							
I am confident about how to manage money and finances as a participant.	PRE	3.18	2.74	3.63	3.34	3.03	3.65
	POST	3.77	3.41	4.13	3.56	3.27	3.85
	DIFF	0.59	0.27	0.92	0.22	-0.06	0.50
I know what support is available at university.	PRE	3.32	2.97	3.66	3.64	3.36	3.92
	POST	4.50	4.24	4.76	3.64	3.36	3.92
	DIFF	1.18	0.86	1.51	0.00	-0.27	0.27
I know how to access support available at university.	PRE	3.14	2.74	3.53	3.38	3.08	3.68
	POST	4.14	3.85	4.42	3.50	3.21	3.79
	DIFF	1.00	0.59	1.41	0.12	-0.08	0.32
I have the skills and abilities to navigate participant life whilst studying.	PRE	3.41	2.94	3.88	3.72	3.50	3.94
	POST	4.14	3.98	4.29	3.86	3.65	4.07
	DIFF	0.73	0.27	1.18	0.14	-0.08	0.36

Evaluation Question 2

To what extent is there a difference between attendees' and non-attendees' scores for each of the questions and for each stage (pre, post, diff)?

We calculated the overall mean for each scale by averaging the scores of all individual questions that make up the scale and observed that IG came to the Summer School with lower mean scores than CG across all scales (see 'Overall' section of Table 4). **This suggests that lower levels of academic self-efficacy, sense of belonging, and knowledge and confidence may have influenced COH's decision to self-select into the Summer School.**

When examining individual questions within the scales for the pre survey, IG had slightly lower mean pre scores than CG on two academic self-efficacy questions and two knowledge and confidence questions (see Table 4). Specifically, IG participants reported a mean pre score of 3.55 (95% CI [3.19, 3.90]) for their perceived ability to manage university-level study, suggesting that the true population mean for COH who self-select for the Summer School likely falls below a score of 4 (agree). This indicates that IG participants were less likely to agree that they could manage university-level study. In contrast, CG participants had a higher mean pre score of 4.10 (95% CI [3.96, 4.24]) for the same question.

A similar pattern was observed for knowledge of available support (IG $M = 3.32$, 95% CI [2.97, 3.66] vs. CG $M = 3.64$, 95% CI [3.36, 3.92]) and the capacity to navigate student life (IG $M = 3.41$, 95% CI [2.94, 3.88] vs. CG $M = 3.72$, 95% CI [3.50, 3.94]). For these questions, IG participants were more likely to disagree or remain neutral, while CG participants were more likely to agree. **This suggests that COH who self-select into the Summer School may do so because they perceive themselves as less capable of managing university-level study and navigating student life, as well as having less knowledge about available support at university.**

When running our statistical analyses for the previous evaluation question (evaluation question 1), we compared pre and post scores within IG and within CG. To test evaluation question 2, we conducted tests to compare IG scores to CG scores. Specifically, we compared IG and CG scores at all three points: IG pre scores with CG pre scores, IG post scores with CG post scores, and IG diff scores with CG diff scores. These tests were conducted to better understand where specific, significant differences may exist between IG and CG.

Although some significant differences were found, they primarily echoed the findings described above, that attendance at the Summer School is associated with significant improvements in most questions (see Tables 5b-c). However, two notable findings emerged when comparing pre scores for academic self-efficacy between IG and CG (Table 5a).

Firstly, IG showed a significant moderate difference in confidence that they could achieve the exam results required to progress to university compared to CG ($z = 2.644$, $p = .008$, $r = .312$, Mann Whitney U Test). IG were more likely to believe they would get the necessary exam results to progress to university than CG. **This could suggest that COH are more likely to self-select to attend the Summer School if they believe they have a higher chance of**

getting the required grades for university admission. Secondly, CG scored significantly higher than IG participants, with a moderate effect size, in confidence that they could manage university-level study ($z = -3.285$, $p = .001$, $r = .387$, Mann Whitney U Test). **This suggests that COH may be less likely to self-select for the Summer School if they already feel confident in their ability to handle university-level work.**

These findings thus suggest that academic self-efficacy plays a significant role in COH's decisions to attend the Summer School. **COH who are confident they can achieve the required grades but feel less confident in their ability to manage university-level study may be more likely to self-select to attend the Summer School.**

Table 5a

Summary of Mann Whitney U Test comparing IG pre scores and CG pre scores for each question

Question	<i>z</i>	<i>p</i>	<i>r</i>	Significant	Effect size
TASO Academic Self-Efficacy Scale					
I am confident that I can get the exam results required to progress to university.	2.644	0.008	0.312	Yes	Medium
I have the academic ability to do well at university.	-1.381	0.167	-0.163	No	Small
I could manage with the level of study required at university.	-3.285	0.001	-0.387	Yes	Medium
TASO Sense of Belonging Scale					
University is for people like me.	0.767	0.443	0.090	No	Very small/ no effect
I would fit in well academically with others at university.	-0.698	0.485	-0.082	No	Very small/ no effect
I would fit in well socially with others at university.	-0.676	0.499	-0.080	No	Very small/ no effect
WA Team Knowledge and Confidence Scale					
I am confident about how to manage money and finances as a student.	-0.581	0.561	-0.068	No	Very small/ no effect
I know what support is available at university.	-1.272	0.203	-0.150	No	Small
I know how to access support available at university.	-0.911	0.363	-0.107	No	Small
I have the skills and abilities to navigate student life whilst studying.	-0.997	0.319	-0.117	No	Small

Table 5b

Summary of Mann Whitney U Test comparing IG post scores and CG post scores for each question

Question	<i>z</i>	<i>p</i>	<i>r</i>	Significant	Effect size
TASO Academic Self-Efficacy Scale					
I am confident that I can get the exam results required to progress to university.	2.026	0.043	0.239	Yes	Small
I have the academic ability to do well at university.	-0.790	0.429	-0.093	No	Very small/ no effect
I could manage with the level of study required at university.	-0.453	0.651	-0.053	No	Very small/ no effect
TASO Sense of Belonging Scale					
University is for people like me.	2.001	0.045	0.236	Yes	Small
I would fit in well academically with others at university.	1.874	0.061	0.221	No	Small
I would fit in well socially with others at university.	1.144	0.253	0.135	No	Small
WA Team Knowledge and Confidence Scale					
I am confident about how to manage money and finances as a student.	0.868	0.385	0.102	No	Small
I know what support is available at university.	3.617	0.000	0.426	Yes	Medium
I know how to access support available at university.	2.546	0.011	0.300	Yes	Medium

I have the skills and abilities to navigate student life whilst studying.	1.618	0.106	0.191	No	Small
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Table 5c

Summary of Mann Whitney U Test comparing IG diff scores and CG diff scores for each question

Question	<i>z</i>	<i>p</i>	<i>r</i>	Significant	Effect size
TASO Academic Self-Efficacy Scale					
I am confident that I can get the exam results required to progress to university.	-0.008	0.994	-0.001	No	Very small/ no effect
I have the academic ability to do well at university.	0.593	0.553	0.070	No	Very small/ no effect
I could manage with the level of study required at university.	2.475	0.013	0.292	Yes	Small
TASO Sense of Belonging Scale					
University is for people like me.	1.493	0.136	0.176	No	Small
I would fit in well academically with others at university.	2.506	0.012	0.295	Yes	Small
I would fit in well socially with others at university.	1.781	0.075	0.210	No	Small
WA Team Knowledge and Confidence Scale					
I am confident about how to manage money and finances as a student.	1.269	0.204	0.150	No	Small
I know what support is available at university.	4.762	0.000	0.561	Yes	Large
I know how to access support available at university.	3.952	0.000	0.466	Yes	Medium
I have the skills and abilities to navigate student life whilst studying.	2.051	0.040	0.242	Yes	Small

Evaluation Question 3

Is there any difference between demographic groups diff scores? If so, which demographic groups and which study groups (IG or CG)?

Tests were run to determine if there were any significant differences for demographic groups across both CG and IG. These tests examined differences within each study group (e.g. between participants from state schools and independent schools within IG) as well as between the two study groups (e.g. comparing IG and CG participants from IMD Q1).

The analysis focused on proxy measures of socio-economic status namely: IMD, parents' HE qualifications, and school type. Few differences were found and those observed were severely limited by small sample sizes. Therefore, we have not included these findings in this interim report.