Unmasking the Disparities: A Case Study of Inequality and Disadvantage Experienced by Ethnic Minority Students Made Visible during the COVID-19 Pandemic

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***Abstract*—This paper explores lessons from the COVID-19 pandemic about pre-existing inequalities for the progression and retention of Black, Asian, and Minority Ethnic (BAME*) students while proposing strategies to mitigate disadvantage. The research assesses study performance and progression patterns using quantitative data analytics and conducts qualitative focus groups to understand students' experiences during COVID-19. Combining quantitative data analysis and qualitative insights provides a richer interpretation of the experiences and performance of these students during the pandemic. COVID-19 made visible and exacerbated pre-existing structural and institutional inequalities and disadvantages experienced by BAME students engaged in distance learning. The findings, although specific to The Open University and Level 1 Computing modules, can be generalized with further research to explore their applicability to other educational settings and disciplines. Our findings can inform the development of targeted interventions and support strategies to address disparities and mitigate their impact, and the methodology and analysis developed can easily be extended to include other modules in future studies. These findings contribute to promoting equality and creating an inclusive learning environment in higher education, offering a unique contribution to the existing literature by specifically examining the impact of COVID-19 in exposing inequalities experienced by ethnic minority students. Recommendations arising from the study include enhancing support structures, revisiting evidence requirements to reduce barriers to support, fostering a sense of community and belonging, increasing diversity among staff members, conducting thorough data analysis for evidence-based decision-making, developing individualized support plans for students, revisiting tuition strategies to create an inclusive and supportive learning environment, providing proactive support and monitoring, enhancing the user-friendliness of resources, improving unconscious bias training, and preserving a focus on equity, diversity, and inclusion in the face of financial challenges.**

***Keywords*—awarding gap, BAME, COVID-19, ethnic minority students, higher education, mixed methods, study experiences**

I. Introduction

This study began as an exploration of the impact of COVID-19 on progression and retention of Black, Asian, and Minority Ethnic (BAME) students on level 1 computing modules at the Open University (OU). However, it quickly became apparent that COVID-19 arrived in a context of significant pre-existing inequalities, including a degree awarding gap, between students from BAME backgrounds and students from white ethnic backgrounds. Previous research has indicated disparities in academic attainment between ethnic minority students and their white counterparts. Research conducted at the OU [1] using data from 150,000 students confirmed the existence of an awarding gap for BAME students, who were 20% less likely to achieve excellent grades and required 4–12% additional study time compared to white students. Evidence confirms that the COVID-19 pandemic did not create, but exacerbated and exposed longstanding ethnic inequalities in health, employment, and education in the UK [2]. The literature search summarized below revealed pre-existing structural explanations for higher risks of COVID-19 for BAME individuals and communities and that BAME students experienced inequalities in relation to the following overlapping categories:

- Economic disadvantage
- Digital divide
- Housing
- Employment
- Racism, discrimination, hate and mental health
- Unconscious bias

The study investigates the links between structural factors, institutional factors and student progression which were brought into sharp focus during the COVID-19 pandemic. Research has consistently demonstrated that data-driven, student-centered approaches can

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effectively address awarding gaps in higher education [3, 4].

A. Rationale

Building upon the consistent research evidence affirming the efficacy of data-driven, student-centered approaches in addressing awarding gaps within higher education [3, 4], this study establishes its objectives to comprehensively delve into the dynamics surrounding these gaps and the impact of COVID-19, in line with a broader rationale centered on fostering educational equity and inclusivity. To achieve this overarching aim, the study delineates a set of specific objectives, each aimed at shedding light on different facets of the awarding gap and the repercussions of the pandemic.

- OBJ1: To gain a comprehensive understanding of the factors contributing to the awarding gap between BAME students and other students in the core level 1 computing modules, namely TM111 TM112, and TM129.
- OBJ2: To locate the specific impact of COVID-19 on the attainment of BAME students, as well as their overall study experience, in level 1 modules in the context of structural and systemic disadvantage.
- OBJ3: To identify and share lessons learned and good practices within the field of Computing and Communications, both within The Open University and beyond.
- OBJ4: To disseminate the outcomes of the project, including research findings and developed analytical methods, to relevant stakeholders both internally and externally to The Open University.

By addressing these objectives, the project seeks to use valuable insights from the impact of COVID-19 on BAME students' awarding gap and study experiences in the field of Computing and Communications. The aim is to develop targeted interventions and support programs to address disparities in completion and pass rates among different ethnic groups, particularly among Asian and Black students. These interventions may include academic support, mentoring, and culturally responsive strategies to promote equitable outcomes for all students, regardless of their ethnic backgrounds.

B. Methodology

We adopted a mix of quantitative and qualitative methods. Using datasets from the Data and Student Analytics and the COVID-19 impact dashboard we analyzed the time series and correlated the data by running computer simulations. A comparative study of different students' demographics was also performed. To capture the views of both Associate Lecturers (ALs) and key stakeholders we conducted focus groups with tutors, key stakeholders, and Student Support Team (SST) leads to identify underlying factors that may influence completion and pass rates, including potential barriers or biases that may impact different student groups differently. Research questions generated during a literature search informed the research process.

RQ1: What are the key factors contributing to the awarding gap between BAME students and other students in the core level 1 computing modules (TM111, TM112, and TM129)?

RQ2: How did COVID-19 specifically impact the attainment and overall study experience of BAME students in level 1 computing modules, considering structural and systemic disadvantages?

RQ3: What lessons learned and good practices can be identified within the field of Computing and Communications, and how can these be applied to address disparities?

C. Uniqueness of the Study

The undergraduate student population of the OU is home-based, their experience as students is always intertwined with their everyday lives, at home, in their communities, and at work. This study provides insight into the granular experiences of OU students from BAME background which are unlike those of the majority of undergraduates studying at brick universities.

II. Literature Review

While the proportion of UK students awarded a 'good' degree (First or 2.1 classification) has risen there is a significant disparity between the proportion of students from white ethnic backgrounds awarded a top degree classification and the proportion of students from BAME backgrounds receiving a First or 2.1 classification [5–8]. This disparity, referred to as the degree awarding gap, varies between and within different ethnicities, and also whether a student studies full-time or part-time, as illustrated in Table I.

TABLE I. Degree Awarding Gap. Source: Office for Students, 2021

Student group	Full-time gap	Part-time gap
Black	18.3pp	37.8pp
Asian	7.7pp	30.3pp
Mixed	3.6pp	17.0pp
Other	9.9pp	28.0pp

The degree awarding gap is one of the pre-existing vectors of inequality for BAME students in the context of COVID-19 [6, 7]. The implications are profound as many graduate-level jobs, postgraduate degrees, and related bursaries require graduates to have a minimum 2.1 degree. Therefore, the degree awarding gap has potentially significant consequences for future life chances of BAME graduates.

Risks from COVID-19 impacted social demographics unequally in the UK. Genetic factors play only a limited part in ethnic inequalities in health outcomes from COVID-19 [9, 10] and evidence points to pre-existing structural explanations for the higher risks of COVID-19 for BAME individuals and communities [11]. These explanations fall under a range of frequently overlapping factors:

- Economic disadvantage: The poverty rate in the UK is twice as high for black and minority ethnic groups as for white groups [6, 12, 13]. BAME groups are more likely to be in zero hours contracts and non-salaried work, and/or have low incomes [9, 12].
- Digital divide: The digital divide refers to the gap between those who have access to data, information, and physical resources that characterize digital societies and those who do not. In 2019, the ONS reported disparities across household income and ethnicity in relation to such access [11].
- Housing: BAME communities are more likely than white British to be renting accommodation and not own their own home, and crucially are more likely to live in overcrowded and/or intergenerational households [9].
- Employment: During the pandemic, there was an imbalance between ethnic groups in their likelihood to be working in at-risk occupations as key workers in public-facing roles. In the NHS, the highest numbers of deaths recorded were disproportionately amongst ethnic minorities [11].
- Racism, discrimination, hate, and mental health: While the pandemic has had a significant impact on the mental health of all learners, evidence suggests that learners from BAME communities are experiencing more impact on mental health and higher anxiety than white counterparts [14] with evidence that BAME students are vulnerable to verbal and physical abuse [12].
- Unconscious bias: In campus university settings, BAME students are consistently graded lower and given less favorable feedback on assessments than their white peers. The degree to which these biases are replicated in the distance learning university setting is an under researched area, but evidence so far suggests they may be [12].

III. Statistical Data Collection and Analysis

We followed a systematic approach that involved data collection, cleaning, analysis, and modelling. We gathered data on the awarding gaps for different ethnic groups at the OU. We also collected data on COVID-19 cases and their impact on academic performance. Example: https://www.hesa.ac.uk/insight/19-01-2023/impact-covid-19-2022-student-data. Additionally, we considered data on other factors that may impact the awarding gap, such as socio-economic status, parental education, and other demographic factors. Example: https://warwick.ac.uk/fac/soc/economics/research/workingpapers/2022/twerp_1410_-_naylor.pdf.

The data provided is related to the academic year, course level, BAME student status, ethnic group, and various statistics related to course completion and passing percentages. The dataset also includes information on different course levels (0, 1, 2, 3, and X). We examined the completion and pass rates at different course levels, and we focused on L1 computing modules. We cleaned the data and transformed it into a suitable format for analysis and modelling.

The data analysis in this project followed a hierarchical approach, starting at the institutional level to gain a broader perspective on the impact of the COVID-19 pandemic on student outcomes and experiences, and subsequently narrowing down to cross-faculty analysis. Within the STEM faculty, we honed our analysis further by concentrating on Level 1 computing modules. These modules were chosen due to their significance in the field and their susceptibility to disruptions caused by the pandemic. By delving into the data specifically within Level 1 computing modules, we aimed to gain precise insights into the impact of the COVID-19 pandemic on student attainment and study experiences in this particular academic domain. This sequential approach allowed us to explore the nuances of the data and understand the specific challenges faced by students in the context of the pandemic [15].

A. Modules Analysis

When comparing the performance of BAME students to non-BAME students across the three modules, TM111, TM112, and TM129, BAME students consistently had lower pass and completion rates compared to non-BAME students, as shown in Fig. 1. For example, in both academic years, the pass rate for BAME students in TM111 (60.3% in 2019/20 and 61.0% in 2020/21) was lower than that of non-BAME students (70.5% in 2019/20 and 70.2% in 2020/21). Similarly, the pass rate for BAME students in TM129 (65.7% in 2019/20 and 60.5% in 2020/21) was lower than that of non-BAME students (74.3% in 2019/20 and 73.2% in 2020/21). Although the pass rate for TM111 among BAME students remained relatively stable between the two academic years, TM112 saw a decrease in the pass rate for BAME students from 74.2% to 66.4%. TM129 also experienced a decline in the pass rate for BAME students from 65.7% to 60.5%.

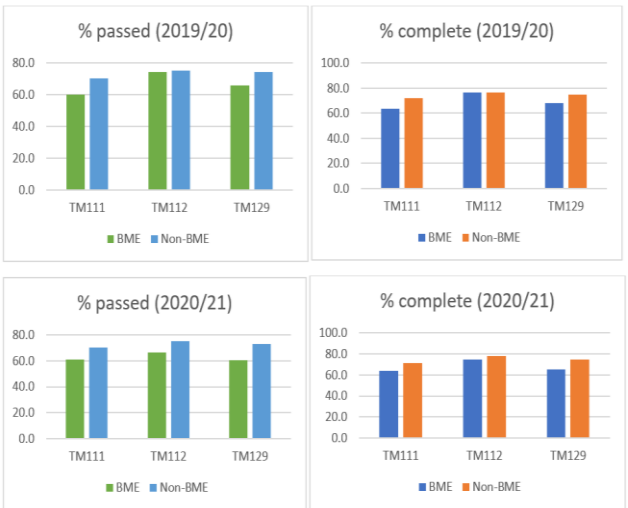

Fig. 1. Pass and completion rates for Level 1 computing modules among BAME and non-BAME students at the OU during the COVID-19 pandemic.

B. Ethnic Group Disparities

There are disparities in completion and pass rates between different ethnic groups, as shown in Table II. For example, the completion and pass rates for Asian and Black students are generally lower compared to White students. It is crucial to further explore the underlying reasons for these disparities, such as potential barriers or biases that may be affecting the academic performance of certain ethnic groups. Strategies should be developed to address these disparities and promote equitable outcomes for all students, regardless of their ethnic backgrounds.

From the data, we can see that in both academic years, the completion and pass rates for BAME students are generally lower compared to non-BAME students. This suggests that there may be disparities in completion and pass rates among different ethnic groups, with BAME students experiencing lower rates compared to non-BAME students. It is important to note that these completion rates and pass rates are calculated as percentages and may not necessarily imply causality. There could be various factors that contribute to the disparities observed, such as differences in student populations, access to resources, or systemic biases. Therefore, we run focus groups for further analysis and investigation to identify and address any underlying issues related to the disparities in completion and pass rates among different ethnic groups.

TABLE II. COMPLETION RATE AND PASS RATE FOR LEVEL 1 MODULES AT THE OU DURING THE PANDEMIC

Academic year	Level 1	No. reg @ 25% FLP (aka day 14)	No. complete	% complete	No. passed	% passed
2019/20	BAME	7145	4871	68.2	4651	65.1
	Non-BAME	59449	42599	71.7	41778	70.3
2020/21	BAME	8506	5595	65.8	5289	62.2
	Non-BAME	73036	50546	69.2	49173	67.3

C. BAME Student Status

The dataset includes a column indicating whether students identify as BAME. It is important to note that completion and pass rates can vary among different ethnic groups within the BAME category. As shown in Table III, Asian students have the highest completion and pass rates, while Black students have relatively lower rates compared to other ethnic groups. Gypsy and Mixed students have completion and pass rates of 50% or above. Other students also have relatively high completion and pass rates.

- BAME Asian students: In 2019/20, the completion rate was 72.6% and the pass rate was 70.0%. In 2020/21, the completion rate decreased slightly to 69.2% and the pass rate also decreased to 65.4%.
- BAME Black students: In 2019/20, the completion rate was 63.3% and the pass rate was 59.0%. In 2020/21, the completion rate further decreased to 61.0% and the pass rate also decreased to 56.0%.
- BAME Gypsy students: In 2019/20, the completion rate was 50.0% and the pass rate was 50.0%. In 2020/21, the completion rate slightly increased to 56.7% and the pass rate also increased to 53.3%.
- BAME Mixed students: In 2019/20, the completion rate was 66.4% and the pass rate was 64.2%. In 2020/21, the completion rate decreased slightly to 65.0% and the pass rate also decreased to 62.7%.

Hence, the completion and pass rates for BAME students show some fluctuations between 2019/20 and 2020/21, with some ethnic groups experiencing slight decreases in completion and pass rates, while others showed small increases. Further analysis, including examining potential factors such as changes in student demographics, educational policies, or institutional support, may be necessary to better understand these trends and identify any potential disparities or underlying reasons for the changes.

TABLE III. COMPARISON OF COMPLETION AND PASS RATES FOR BAME STUDENTS BASED ON THEIR ETHNIC GROUP FOR 2020/21

BAME?	Ethnic_ group	No. reg @ 25% FLP (aka day 14)	No. complete	% complete	No. passed	% passed
No	Missing	1089	560	51.4	551	50.6
No	Refused	1436	1025	71.4	994	69.2
No	White	70511	48961	69.4	47628	67.5
Yes	Asian	2926	2026	69.2	1914	65.4
Yes	Black	2368	1445	61.0	1327	56.0
Yes	Gypsy	30	17	56.7	16	53.3
Yes	Mixed	2458	1597	65.0	1542	62.7
Yes	Other	724	510	70.4	490	67.7

IV. FOCUS GROUP DATA COLLECTION AND ANALYSIS

Two focus groups were conducted comparing Open University educators' and stakeholders' perspectives with the statistical data analysis and emerging themes in the literature. Discussion topics prompted by these themes were:

- Whether and in what ways COVID-19 impacted ethnic minority students' learning experiences and study performance in the focus modules for this study.
- The sources and types of support available for students, and the degree to which they were useful in meeting students' needs.
- How the University as an institution could provide a better learning experience and help students from ethnic minority backgrounds perform better in times like COVD-19 and beyond.

Conversations were recorded and transcribed. The focus groups were moderated by a member of the research team, responsible for introducing key questions and topics, and managing turn taking by participants. Transcription of focus group discussions created primary documents for analysis. Conceptual categories were not fixed a priori. Instead, categories were assigned as themes emerged from responses expressed in the raw data.

A. Focus Group Participants and Criteria for Participation

Focus Group 1 (FG1): The criterion for participation was having taught on OU level 1 computing modules during the period of the pandemic, 2019–2021. Five tutors participated in FG1, comprising two women and three men, each of white British/Northern Irish ethnicity.

Focus Group 2 (FG2): The criterion for participation was being engaged in an Open University STEM educational advisory role or a student supporting role during the period of the pandemic, 2019–2021. Six stakeholders participated in FG2, comprising four women and two men. Two were of British BAME background, while four were of white British background.

B. Limitations

FG1 and FG2 participants were those who responded to a call to take part and were therefore self-selecting, so are not necessarily representative of all tutors and stakeholders in the category. Additionally, their views may not reflect those of other tutors in the category. The evidence and analysis would also be enriched by including the views of BAME Level 1 C & C students at the Open University.

C. Results: Correlation of Ethnicity with Students' Learning Experience and Performance

FG1 noted that tutors have no access to data on students' ethnicity, while FG2 participants commented that hard data in relation to ethnicity was not always available or accessible. For both groups, knowledge of students' ethnicity was mainly conveyed through direct contact or inference. Nevertheless, FG2 participants observed that within the significantly higher number of vivas, appeals, and special circumstance cases related to COVID for three successive years in 2020, 2021, and 2022 in the June exam periods, a number of these were from people of a minority ethnic background.

Participants in the focus groups expressed varying perspectives on the relevance of knowing students' ethnicity. A viewpoint from FG1 suggested a preference for not knowing students' background to ensure impartial marking: One participant stated, "I don't particularly want to know the background of my students unless they tell me, because I would like to…mark all the work at face value and rely on the special circumstances process".

In contrast, FG2 EDI and SST stakeholders thought it would be helpful to have data on students' ethnicity. Comments from FG2 included:

- "I definitely have a sense of intersectionality being the crucial thing, and that it's…definitely the minority ethnic students who were affected by [COVID-19]."
- "I don't think I know this from a…hard data point of view and I feel bad about not knowing that."
- "[Ethnicity] data analysis… I think that's something we need to work on."

FG1 was keen to emphasize that ethnicity is not in itself the significant factor impacting the experiences and performance of ethnic minority students. One participant highlighted: "It's the other things that perhaps they've had to manage rather than…ethnicity, that biased against their success. That's financial income. It could be family matters. It could be other things".

Here we can note some convergence of views between FG1 and FG2, that intersectionality and structural contexts are causal factors. This acknowledgment emphasizes the multifaceted nature of barriers to success and underlines the interconnected impact of various elements such as financial constraints, family dynamics, and other contextual factors on students' academic journeys.

D. Structural Factors Impacting the Learning Experiences and Study Performance of Students

FG1 and FG2 identified a number of structural factors impacting on the learning experiences and study performance of students, including BAME students. Both groups identified the following:

- **Poverty and the digital divide:** Participants in FG1 and FG2 recognized poverty as a major issue impacting students. This was exemplified by instances where students faced challenges such as broken laptops and financial constraints.

  "My opinion is that the biggest issue is poverty… I have had students…that have asked for extensions because they have a broken laptop and they have to wait until payday before they can…have the laptop repaired."

  "What I'm most aware of is sometimes students don't have enough money and that to me is a big thing that might cause student retention problems."

FG1 linked poverty with the digital divide:

> "The technological divide was absolutely critical in terms of people getting access to learning online."
>
> "Poverty and the digital divide, were the key issues that caused problems during the pandemic."

There was an acknowledgment that poverty and the digital divide could be compounded by factors related to ethnicity:

> "If [ethnicity]was also highly correlated with, you know, poor access to technology and [being] poor…. Then clearly there were issues."
>
> FG2 participants explicitly noted the interaction between economic disadvantage and ethnicity, as well as overlap between poverty and other structural factors. The following statements reflect their insights: "This feels terribly anecdotal… But it's that…combination of multiple factors…that I certainly observe".
>
> "And economic issues, the fact of…the complex interaction that there is between economic disadvantage and ethnicity."

Intersectionality and overlaps between structural factors were implicit in comments about housing and family responsibilities intersecting with gender inequalities, particularly in relation to childcare at the

height of lockdown. The following statements capture these insights:

> "Online examinations… Seemed to favor those who've got a study and a partner who's going to answer the door and everything else."
>
> "If you're not in…the best home environment and you're having to take an exam in that kind of situation that was, you know, really tough."
>
> "Since the pandemic…when you do the extensions… I'm noting down things to do with the family circumstances a lot more."
>
> "Since COVID there has continued to be an increase in referrals to the team, whether that be, welfare, whether that be well-being and cost of living and also safeguarding."

- **Mental health issues**

Mental health challenges experienced by BAME students were prominent in both FG1 and FG2 discussions:

"There was a massive increase around the impacts of mental health, suicidal ideation and also increases in students contemplating to take their own lives."

Conversations with BAME students often revealed feelings of isolation and loneliness:

"It's more than just distance learning… They don't have that sense of connection with the Open University… That feeling…as a Black, Asian. person, my issues, my problems will be understood by the person that I'm speaking to on the phone."

- **Employment**

Participants observed that individuals working for the National Health Service (NHS) faced difficulties due to their overwhelming workload during the pandemic, impacting their ability to engage with course materials.

"The ones that I find…were having problems at that stage were actually anybody that was working for the National Health Service because they were inundated and working so hard, they couldn't get [unclear] to the material."

- **Vaccine hesitancy**

It was observed in FG2 that anxieties about whether COVID-19 vaccinations, and institutional promotion of them, were expressed by students in discussion forums:

"There's a lot of mistrust within certain…ethnic minorities around…is this good for me?… Because of….things [that] have happened in the past.… There was a lot of pressure [to] get as many ethnic minority people on board with the vaccinations and that really kind of came through in the sense of a lot of conversations that these students were having."

It was suggested that this pressure impacted how safe and willing students felt to interact with the support and the communities that exist at the Open University. The category of vaccine hesitancy as a structural factor specifically impacting BAME students' learning experience, and sense of belonging within a given institution, has not, so far, been explored in the literature. However, vaccine hesitancy is discussed in reviews of COVID misinformation on social media during the pandemic [16]. While vaccine hesitancy is discussed in the context of COVID misinformation on social media, its implications for students' interactions with educational support systems and communities at institutions like The Open University provide a unique perspective that warrants further exploration in future research.

E. Institutional Factors Impacting the Learning Experiences and Study Performance of Students

- **Quality of support**

It was noted that strategies to support students are not interconnected and there is a lack of continuity though a students' learning experience. Referrals made through student support often lacked follow-up, indicating a need for more coordinated and comprehensive support systems:

"You do a referral for them through the student support…and…never hear anymore about that…. There's no coming together of strategies to support the students."

There were also comments about the varying quality of support from tutors:

"Tutors vary a lot in what they do. I…monitor other tutors and… I see complaints about other tutors in the forums. You know, I haven't heard back from my tutor yet."

Discrepancies in responsiveness and effectiveness were observed, with some students expressing dissatisfaction with the support received from certain tutors. The issue was not specific to minority students but appeared to be a general concern.

"It's nothing to do with minorities. It's to do with the fact that there are particular students had those particular tutors and they didn't work with them.… [Had the] same students been with other tutors that would have a different outcome."

On the other hand, one FG1 participant discussed the evolving role of tutors, noting that the role of tutor-counselors had been assumed by student support personnel. This transition may have influenced the dynamics of support and the outcomes for students. One FG1 participant commented:

"It's difficult to see how tutors could be…not up to scratch because… the role of the tutor councilor has been taken over…by the student support people."

Concern was voiced in FG2 about unconscious bias on the part of some tutors:

"They just sort of assume things about the student which can really impact the student's journey…Students…come to the personal learning advisor team asking for the kind of support that a tutor could actually provide, but they don't feel comfortable reaching out."

FG2 participants described a mixed picture of support levels and students' capacity to access support. It was noted that students are not always aware that they can contact the student support team and do not know what support is available, or they may be embarrassed to do so:

"It's like stigma to the student. They seem to think that if they declare something, you know, sort of the wee bit of stigma attached to it."

Nevertheless, it was noted that support from ALs and SSTs during COVID had often enabled students to progress with their studies successfully:

"Some tutors…are brilliant and go above and beyond."

It was also noted that during the years of the pandemic there had been significant institutional flexibility in allowing for special circumstances and discretionary postponements.

These findings underscore the importance of creating a more integrated and consistent support framework for students. Addressing variability in tutor support, ensuring effective communication and follow-up, and actively addressing unconscious bias are crucial steps toward enhancing the overall quality of support provided to students, regardless of their background or ethnicity.

- **Unconscious bias and systemic racism**

However, institutional factors were also identified as exacerbating negative study experience for BAME students. It was commented that while the OU espouses social justice values, whether the University takes enough action to fulfill those values is open to question:

"We focus a lot on helping black students with the issues that they're encountering, and it includes a lot of…systemic racism, including….the topics, how they're presented and how ALs perceive their students."

As noted above it was commented that how tutors perform their role and provide pastoral support has a big impact on students' study experience:

"Quite a few times when there's a student of an ethnic minority, and I've referred them…[to] a specific pilot called English for Academic Purposes….reports come back and the tutor has said that…English is the student's second language or it's not their first language, but then the student has said that it is their first language."

The discussions underscored the importance of addressing unconscious bias within the institution, both in terms of how tutors perceive and support students and in the broader context of curriculum design. The suggestion to do better in decolonizing the curriculum reflects a commitment to creating a more inclusive learning environment:

"I think…as an institution, we could do better…decolonizing the curriculum… It's really difficult to start with…and then to get your colleagues still on board and all sorts of stuff."

- **Institutional policies**

As noted above participants referred to the unequal impact of the switch to exams being taken at home online. There was a perception that decision-makers might not be fully attuned to the challenges faced by students in specific situations, emphasizing the importance of considering diverse perspectives when formulating policies:

"I suppose the people who make the decisions on you know those policies and things probably weren't as attuned to that cause they're not, you know, working in that kind of situation."

- **Evidence requirements**

These can be challenging. For some students, it is difficult to prove they are experiencing economic hardship or have a disability. It was noted that there could be a number of reasons that students were unable to gather sufficient evidence. This underscores the need for flexibility and understanding in accommodating the diverse circumstances of students.

- **Lack of institutional diversity**

This contributes to a lack of confidence from BAME students that their problems will be understood. The participants emphasized the importance of having a diverse staff that students can relate to, as this fosters a sense of understanding and support:

"It's important…to know that you've got people that look like you working there… Ohh, you know if you're black or an Asian, you're gonna think, yeah, absolutely, 100% can relate to that…. They probably have a better understand[ing]…because they look like me."

- **Institutional resistance to targeted support for BAME students**

FG2 participants hinted at institutional resistance to targeted interventions with an emphasis on underrepresented black, Asian, and other ethnic minority groups. An Access Participation Plan (APP) initially set up to organize regular support sessions for BAME students starting out on TM111, with the aim of building a sense of community and belonging, was not carried out in the way the team had initially envisaged. Rather the program had to be offered to all students across TM111. The support sessions were then discontinued and reconfigured as a day event to celebrate diversity and achievement in the school.

F. Solutions to Factors Impacting the Learning Experiences and Study Performance of Students

Focus group participants suggested a number of solutions to the issues they identified:

- **Targeted interventions in relation to awarding gaps**

More targeted action is needed, such as the original initiative for the APP mentioned above, to overcome barriers to social justice.

- **Lack of collaborative approach to supporting students and variation in level of pastoral tutor support**

Students should have a single point of contact person who stays with them throughout their studies and develops with the student an individual study plan. The quotes emphasize the belief that a focused support figure is better equipped to address diverse challenges, drawing parallels with successful support for apprentices:

"All of the things that we're talking about would actually be better dealt with…by a single person with pastoral responsibility for the student, separate from the teaching responsibility."

"The one group of students I never have any problems with are the apprentices… We give them a huge amount of pastoral support and it works."

- **The digital divide**

Addressing the digital divide, participants expressed a desire for a fund or facility to assist financially challenged students in obtaining essential computing equipment. The sentiment was captured in the suggestion that such support could benefit those with limited resources, emphasizing the need to level the playing field

for students with less privileged access to technology: "It would be nice if there were some sort of fund or facility whereby the poorest of students could get some help with computing equipment…. You know, somebody with a crappy laptop, help them somehow".

- **Housing and family circumstances**

Acknowledging the impact of housing and family circumstances on online exams, participants highlighted potential disadvantages for students lacking adequate home space or dealing with family responsibilities. The call for solutions indicates a recognition of these challenges, emphasizing the importance of ensuring a fair assessment environment for all students, regardless of their living situations.

- **Evidence barriers**

Participants identified challenges arising from current evidence requirements, urging for more flexibility through increased consideration of exemptions and special circumstances. This highlights the need for a nuanced approach to accommodate students facing unique challenges, ensuring that assessment criteria align with diverse learning circumstances.

- **Building community and belonging**

Participants underscored the importance of fostering a sense of community and belonging by providing students with opportunities to connect and receive support from peers sharing the same cultural background. This need, strongly emphasized in student feedback, suggests a desire for initiatives that promote inclusivity. One suggested approach is the potential revival of the access and participation plan, focusing on its original intent to enhance community engagement.

- **Joined-up community of support and joined up systems**

Concerns were raised about the current handling of special circumstances and discretionary postponement forms online. Participants noted a dependency on individual triggers, leading to potential oversights in dealing with highly sensitive information. The lack of follow-up or referral to the support team was seen as contributing to feelings of isolation. The recommendation is for the Open University to address these issues and implement changes to create a more cohesive and supportive system.

- **Lack of diversity**

Participants emphasized the need for greater diversity within the Open University, particularly by recruiting individuals from minority ethnic backgrounds. This call for diversity extends to Associate Lecturers (ALs) who can better understand the experiences and needs of Black, Asian, and Minority Ethnic (BAME) students. Additionally, the plea for diversity extends to module teams and central academics, emphasizing the importance of a varied and inclusive representation to address the ongoing work of decolonizing the curriculum.

- **Open University Students Association (OUSA)**

Participants highlighted the importance of visibility for Black, Asian, and Minority Ethnic (BAME) students on the main Open University Students Association (OUSA) page. The recommendation is to enhance the visibility of BAME-related content and resources, fostering a more inclusive environment and ensuring that students from diverse backgrounds can easily access relevant information and support.

- **Data**

Concerns were raised about the lack of comprehensive data regarding the needs and experiences of BAME students. Participants advocated for a more robust approach to data collection to gain a deeper understanding of the unique challenges faced by BAME students. The call for more hard data underscores the importance of evidence-based decision-making to address specific needs effectively.

- **Revisit tuition strategy**

Participants suggested a reevaluation of the tuition strategy, emphasizing the need to directly involve students in the process. The strategy should be shaped by understanding what students, particularly those from Black, Asian, and Minority Ethnic (BAME) backgrounds, want and what would foster a sense of belonging. The strategy should aim to build personal relationships to enhance the overall student experience.

- **Proactive focus on retention by module teams/tutors**

Module teams need to work more closely with tutors to be proactive in reaching out to students who have not contributed to a forum or not submitted TMA01, rather than leaving it to the student support team to send an automated e-mail. While the latter is a fall back, students need to be offered a direct contact and a second chance to submit to help them over the first hurdle.

- **Tutors' access to voice**

Another concern raised was the lack of access to Voice system for Associate Lecturers (ALs), limiting their visibility into students' progress. Participants stressed the necessity for ALs to have access to Voice to monitor and address issues within their groups promptly. The absence of this access can result in delayed awareness of problems, leading to students withdrawing before timely intervention is possible.

- **Improve HCI**

While acknowledging the wealth of information on the Open University (OU) website, participants noted a need for enhanced user-friendliness, especially for stage one students adjusting to academic and university-level studies. The website, despite its content richness, is identified as a potential barrier. The recommendation is to improve Human-Computer Interaction (HCI) to ensure a more seamless and accessible online experience, particularly for students in the early stages of their academic journey.

- **Unconscious bias training**

Participants expressed dissatisfaction with the current state of unconscious bias training at the My Learning Centre, emphasizing the necessity for substantial improvements. Unconscious bias, particularly in the context of the experiences and needs of Black, Asian, and Minority Ethnic (BAME) students, should be given greater importance. The proposal includes implementing an effective person-to-person module that every

individual joining the Open University completes. This approach aims to ensure that all student-facing staff develop a heightened awareness and sensitivity to the diverse experiences and needs of BAME students.

- **Cuts**

In light of financial and job cuts at the Open University, participants underscored the vital importance of safeguarding Equality, Diversity, and Inclusion (EDI) work and maintaining a focus on the needs of minority ethnic students. The recommendation is to ensure that any restructuring or cuts do not disproportionately disadvantage EDI initiatives and the support provided to minority ethnic students. This perspective emphasizes the commitment to preserving an inclusive and supportive environment even during organizational changes.

V. Discussion

With respect to distance learning, the inequalities and disadvantages experienced by BAME students identified in the literature during the COVID-19 pandemic are likely to be experienced as ongoing for BAME students studying in a distance learning mode. It is therefore especially incumbent upon a distance learning institution such as the Open University to develop solutions which can best support BAME learners, not only during times such as COVID-19, but beyond.

The results of our quantitative data analysis correlate with the broader picture of lower completion and pass rates for BAME students across the HE sector. Additionally, the focus group responses strongly suggest that the Open University BAME student population experience similar levels of inequality and disadvantage, adversely impacting upon their learning experience and study performance. The views of tutors and stakeholders on structural factors impacting students' learning experiences and study performance intersect with those structural factors identified in the literature as adversely and disproportionately affecting BAME students. Students, including BAME students, impacted by structural barriers to learning could benefit from the institution implementing some or all of the suggestions put forward by the focus group participants. Given that focus group participants were often unaware of students' ethnicity, it is not possible to draw firm conclusions on the issues of racism, discrimination, hate, and unconscious bias which had also emerged from the initial literature review. However, these factors do appear to play a part in the learning experience and study performance of BAME Open University students, as explored anecdotally in FG2.

It is important to note that the quantitative and qualitative data presented here raises concerns which have significance beyond the limited duration of the pandemic. The findings confirm evidence from the literature review that the pandemic merely exacerbated pre-existing disadvantages and inequalities for BAME students. Significantly, the focus group conversations highlighted overlaps between structural factors and institutional factors.

VI. Conclusion

Quantitative data analysis of the awarding gaps for different ethnic groups at level 1 at the OU confirmed the pattern of disparity in outcomes identified in the literature. The literature review and focus group discussions revealed that BAME students faced a range of inequalities and disadvantages in relation to economic disadvantage, digital divide, housing, employment, racism, discrimination, unconscious bias, and mental health. While tutors and stakeholders may not always have direct knowledge of students' ethnicity, they acknowledged the significance of these structural factors in impacting students' learning experiences and study performance, made visible during the pandemic.

Institutional factors, including systemic racism, unconscious bias, institutional policies, lack of diversity, and inconsistent support, were also identified as influencing students' experiences. The Open University needs to take proactive measures to address these factors and ensure equitable support for BAME students.

- **Opportunities to mitigate inequalities**

While universities, including the OU, cannot implement alone the structural and societal changes needed to eradicate these inequalities, universities must inevitably be part of the necessary transformation.

In addressing the digital divide and digital poverty, the OU can develop better understanding of the different needs of individual learners from different BAME backgrounds. Data can support early intervention, and provision of the suitable infrastructure and resources to meet those needs.

To address unconscious bias, "We need to assume we not only have the capacity to be biased, but despite our intellectual capabilities, we do practice unconscious bias". Online learning spaces provide unique opportunities to develop, design, implement, and evaluate strategies for promoting equitable learning environments. As Singh notes, "Unconscious bias results from exposure to negative stereotypes. One way of counteracting this is to ensure that the selection of the range of digitally delivered content does not end up erasing BAME subjects, denying them agency or pathologizing them". The OU is particularly well placed to create equitable learning environments. Singh notes that when done well, online environments can reduce anxiety, disrupt stereotypes, and promote the students' sense of belonging that bears directly on student attainment and success.

- **Future recommendations**

Based on the findings, several recommendations can be made for future interventions and improvements. These include implementing targeted interventions to address specific barriers faced by BAME students, revisiting evidence requirements to reduce barriers to support, fostering a sense of community and belonging through access and participation plans, increasing diversity among staff members, conducting thorough data analysis to inform evidence-based decision-making, developing individualized support plans for students, revisiting tuition strategies to create an inclusive and supportive learning environment, providing proactive

support and monitoring, enhancing the user-friendliness of resources, improving unconscious bias training, and preserving a focus on equity, diversity, and inclusion in the face of financial challenges.

By implementing these recommendations, the Open University can strive towards creating a more inclusive and supportive learning environment for BAME students, ensuring that they have equal opportunities to succeed and thrive in their studies. It is crucial to prioritize these efforts not only during times of crisis but also as part of long-term commitments to social justice and educational equity.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

D. Kbaier: Project lead; initiated the project, performed an initial literature search, collected necessary data, performed qualitative analysis, and wrote the initial draft of the paper. S. Kouadri Mostefaoui: Assisted D. Kbaier in obtaining ethical approvals, reviewed qualitative analysis, provided feedback and insights, collaborated on the design of survey questions for the focus groups, and contributed to the review and revision of the paper. A. Kane: Extended literature search, facilitated and conducted the focus groups with S. Kouadri Mostefaoui, performed qualitative analysis, identified emerging themes from the focus groups, and contributed to the review and revision of the paper. All authors contributed to the review and final approval of the paper.

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