

The impact of COVID-19 on black students in higher education: A systematic review of engagement and achievements

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Abstract

COVID-19 has disproportionately impacted black students in higher education (Arday & Jones, 2022; Kiebler & Stewart, 2022; Garcia et al., 2021; Moore et al., 2022). COVID-19 pandemic brought world-wide transformations that were accompanied by several forms of precarities and mental health problems (Arday & Jones, 2022; Rogers, 2021; Li & Wang, 2020). Thus, the current systematic review examines the impact of COVID-19 on black students in higher education. In doing so, it applies the critical race theory to provide insights on reducing racial disparities and to improve outcomes for black students in higher education. This literature review followed the protocol framework of the Cochrane Collaboration and the PRISMA guidelines. The results revealed that Covid-19 was linked with racism towards Black students, poorer mental health and wellbeing of Black students, several precarities in Black students, loneliness and isolation, and poorer access to academic-related support in Black students. These factors influenced lower academic achievements of Black students in higher education. It is recommended that higher education institutions, local communities, and policy makers should provide means of supporting Black and other minority ethnic students by addressing inequalities and access to resources.

Introduction

Since the COVID-19 pandemic, there have been unparalleled world-wide transformations that were accompanied by several forms of precarities (Arday & Jones, 2022), anxiety, depression (Rogers, 2021), and heightened stress and isolation (Li & Wang, 2020). Currently, COVID-19 cases have reached nearly eight hundred million worldwide (World Health Organisation - WHO, 2024). According to the WHO, in 2021, there were over forty-seven million COVID-19 cases in the United States of America (USA), while the figure topped ten million in Britain (Arday & Jones, 2022). This resulted in a series of isolation and national lockdowns in the United Kingdom (UK) (Webster et al., 2020; Zhou & Kan, 2021), thus created avenues for virtual leaning in university settings (Arday & Jones, 2022). In the UK, Office for National Statistics (ONS) data revealed disparities in COVID-19 cases and deaths among black people, for example, black men were nearly five time more likely to die of COVID-19 when compared to white men, and secondly, black women were two time more likely to die of the disease than their white counterparts (ONS, 2020). Such disparities in COVID-19 impact on black people pose adverse effects on black students in higher education (Arday & Jones, 2022). Most black students come from deprived or marginalised black communities whose experience of COVID is coupled by social economic precarities, health inequalities, and discrimination, consequently impacting significantly on their academic journeys and learning (Kiebler & Stewart, 2022). Several research have examined the impact of the COVID-19 pandemic on members of black communities (e.g., Millett et al., 2020; Garcia et al., 2021; Moore et al., 2022), however, currently, there is shortage of literature that focus on the impact of the COVID-19 pandemic on black higher education students in the United Kingdom.

The COVID-19 pandemic brought series of lockdowns to establish social distancing (Arday & Jones, 2022) causing universities and other higher education institutions to implement remote mode of studying (Reyes-Portillo et al., 2022). In Kecejevic et al. (2020) cross-sectional study of the impact of the COVID-19 epidemic on mental health of undergraduate students, they found that transition to online learning caused significant strain, mental distress, and academic difficulties and uncertainties in students. Clabaugh, Duque, and Fields (2021) highlighted that these strains

caused by transitioning to online learning had significantly greater impact on black students compared to white students. These have been shown to be contributory factors that are key in high dropout rates in black students (Reyes-Portillo et al., 2022; Clabaugh et al., 2021) coupled with pre-existing racial disparities regarding entrance to higher education (Reyes-Portillo et al., 2022; Lechner et al., 2020) and access to health care (Devonport et al., 2023; Danso & Danso, 2021), and lower social economic status (Blundell et al., 2021).

COVID-19 and mental health in black students

In most western societies, the prevalence of anxiety and depression in higher education students have a record upsurge since the start of COVID-19 pandemic (Huckins et al., 2020; Schmits et al., 2021). There is no shortage of literature that have demonstrated correlational or causal links between the COVID-19 pandemic and the development or upsurge of mental health symptoms or disorders in higher education students (e.g., Schmits et al., 2021; Rajbhandari-Thapa et al., 2023; Jabbari et al., 2023; Hitch & Zaman, 2023). For example, one year into the COVID-pandemic, Schmits et al. (2021) investigated psychological distress among students in higher education using a sample of both male and female university students (n= 23,307). Schmits et al. (2021) found that there were significantly high rates of anxiety, depression, suicidal ideation, and precarities among students, thus, impacted adversely on their academic journeys and achievements. These forms of COVID-19 linked distresses were found in several studies to be disproportionately higher and more prevalent in students from black communities (Rajbhandari-Thapa et al., 2023; Jabbari et al., 2023). For example, in a study of the role of the COVID-19 pandemic on mental health of students in higher education, Fruehwirth et al. (2021) presented data that revealed that black students experienced significantly disproportionate and higher increase of mental health symptoms such as anxiety and depression (90%) when compared to white students (nearly 32%). While examining race and mental health during COVID-19, Jabbari et al. (2023) also highlighted that black university students experience higher or deeper “hardships” and precarities which facilitate the development of several mental health problems such as anxiety, depression, and suicidal thoughts.

COVID-19 and academic gaps in black students

Systemic racism has subjugated black people in western societies and the United Kingdom which places black communities in disadvantaged social economic, health, and educational situations (McCluney et al., 2021; Banaji, Fiske, & Massey, 2021). These challenges faced by black communities have been exacerbated since the COVID-19 pandemic (Reyes-Portillo et al., 2022; Clabaugh et al., 2021) which have also transcended to black students in higher education (Fruehwirth et al., 2021), thus having significant impact in retention rates and their academic performances (Arday & Jones, 2022; Reyes-Portillo et al., 2022; Clabaugh et al., 2021). Arday and Jones (2022) highlighted in their famous article “same storm, different boats” that the impact of COVID-19 on Black higher education students were based on structural racism and inequalities in higher education causing huge impact on the academic success of black students. This was demonstrated by Schucan Bird and Pitman (2020) who revealed that black academic authors were significant under-represented and reflected on the reading list students can access. All combined negatively affect the grades and academic performance of black students in higher education (Arday & Jones, 2022). Lander, Holloman, and Tan (2021) presented an education briefing paper where they expressed concern over gaps in black students’ educational achievements which have been shown to be widening since the COVID-19 pandemic.

Critical Race Theory (CRT)

As mentioned earlier, black communities experience subjugation through systemic racism causing several forms of disparities in health, social economic background, education, and disadvantaged positions among black people (McCluney et al., 2021; Banaji, Fiske, & Massey, 2021). The existing disadvantaged structure for black communities is particularly impactful on black students (Arday & Jones, 2022) and one of several theoretical frameworks to alleviate their suffering is the CRT. The CRT holds that race is a social construct that has no biological basis and that it is embedded in the law and system causing the oppression of black communities (Delgado & Stefancic, 2000). The CRT can be conceptualised as a theoretical framework and its ideological premise promote social justice and rejects normalised racism. It also recognises that racism cuts past individual acts and portrayals and become embedded in the system and culture. This can be explained further with the inception of the

Black Lives Matter (BLM) movement which protests systemic or structural racism and the protest the use of structures such as the legal system in underpinning social injustices, and racism. In addition, the CRT argues that scholarship is founded and maintained by the same structure that underpins systemic racism (Zuberi and Bonilla-Silva, 2008) and it is committed to challenging narratives that are fastened on stereotypical ideologies and misrepresenting those who have already been victims of racial stigmatisation (DeLeon et al., 2017; López, Erwin, Binder, & Chavez, 2023). The CRT will be used to examine the disproportionate impact of the COVID-19 pandemic on black students in higher education to provide insights on disparities in health outcomes, learning, and academic development.

Aim & Question

The current systematic review examines the impact of COVID-19 on black students in higher education. In doing so, it applies the critical race theory to provide insights on reducing racial disparities and to improve outcomes for black students in higher education.

The PICO Framework was used in formulating the proposed questions for the proposed systematic review of literature. PICO stands for Population, Intervention, Comparison, and Outcome (Scharadt et al., 2007). *See appendix 1 for PICO table.*

Question: *What is the impact of COVID-19 on black students in higher education?*

Methods

This systematic review of the literature examines the impact of COVID-19 on black students in higher education. The questions developed was submitted for revision by personal supervisor/tutor. This systematic review strictly adheres to the systematic review reporting guidelines (Moher et al., 2009). In terms of ethics, systematic review may not be subject to ethical approval, in this case by the University Ethics Committee due to non-human/participant contact in the process of the review, however, measure was taken to ensure that individual contributions are acknowledged, all research articles for inclusion have presented or discussed ethical process involved in their study, and adhere to the Cochrane guidelines for reporting systematic reviews (Wager & Wiffen, 2011).

Search strategy

This systematic review follows the protocol framework of the Cochrane Collaboration. This framework will help to establish transparency and reduce biases (Smith et al., 2011) while examining the impact of COVID-19 pandemic on black students in higher education. *See appendix 2 for search terms and limiters table.*

Following PRISMA guidelines, several data bases were searched using the search terms in *appendix 2* regarding COVID-19 impact on black higher education students. Data bases include PubMed, MEDLINE, Embase, ICTRP, Medline via PubMed, CINAHL Plus, Scopus, Google Scholar, and Cochrane Library. A combination of keywords and search terms used for the data bases include COVID-19 pandemic; Coronavirus; Black students in higher education; Black university students; Critical race theory; and Ethnic disparities.

Inclusion criteria

Prior to database search, criteria for inclusion were established to ensure that the best articles specific to COVID-19 and its impact on black students in higher education will be captured for analysis. Secondary focus was on papers that used critical race theory or comparable theories to examine the disproportionate impact of the COVID-19 pandemic on black students in higher education. Database search was limited to qualitative, quantitative, or mix-methods original research papers that were published in a peer-reviewed journal, written in the English language, and published in or after the year 2020. The quality of extracted primary research papers was checked for quality and reliability using the CRAAP analysis tool. The tool, representing “Currency”, “Relevance”, “Authority”, “Accuracy”, and “Purpose” will be used to evaluate the sources and ensure their information is up to date, accurate, and credible (Esparrago-Kalidas, 2021; Fielding, 2019).

Selection of studies

When research articles have been retrieved, manual eligibility check was carried out by going through all titles and reading abstract of research papers in-line with the proposed criteria for inclusion. Relevant articles were moved to the next stage to be fully screened. The remaining articles were imported to Mendeley, a bibliography/referencing management tool that is utilised in organising research and collaborative working. Mendeley was used to check and remove duplicate articles, while the remaining articles were assessed for PDF file availability. After

these processes, the remaining articles were analysed for the systematic review. *See appendix 3 for PRISMA Flow Diagram.*

Quality assessment

Three quality assessment tools were utilised to check excellence and methodological quality: (1) The Critical Appraisal Skills Programme tool (CASP). This tool is designed to evaluate the strengths and limitations of qualitative research (Long et al., 2020). (2) Quality Assessment Tool for Quantitative Studies (QATQS). The QATQS tool is used in check listing the general quality of a quantitative research study (Thomas et al., 2004). (3) Critically Appraising for Antiracism Checklist (CAAC) was used to complement the CASP and the CAQR and to identify traces of racial biases (Naicker, 2022).

Evidence Summary

See appendix 4 for evidence summary table.

Appraising the evidence

To conduct an assessment as to whether a piece of academic literature is reliable or credible involves a comprehensive and systematic practice of appraisal in the view of its usefulness in a given context (Giacomini, Cook, & De Jean, 2009). There was a critical evaluation of the research articles presented in the current systematic review of literature with the use of Critical Appraisal Skills Programme (CASP) analysis tool to examine the quality of the articles (CASP, 2020). Doing so, would be instrumental in the identification of research articles with high quality, validity, and utility, as well as the identification of biases, misrepresentations, and errors (Long, French, & Brooks, 2020).

Critical analysis

After screening was conducted the 10 remaining articles were prepared for analysis. To guide this process and to ensure credibility, the CASP (2020) analysis tool was used to ensure that the final research articles for analysis were free of biases and errors and characterised by high validity and credibility.

Quantitative:

In this review, six studies solely utilised quantitative methods (e.g.: Nguyen, Rienties, and Richardson, 2020; Francois et al., 2024; Nosek, 2023; Bulman and Fairlie, 2022; Fruehwirth, Biswas, and Perreira, 2021; Wood et al., 2024). For example, in an attempt to examine academic

achievement gaps in students with different ethnicity, Nguyen, Rienties, and Richardson (2020) utilised multilevel models involving 149672 participating students who were enrolled in over 400 modules. They utilised several quantitative analyses including multilevel logistic regression, linear regression, and more. This was key in their findings that BAME students were less likely to complete their programme, less likely to pass, or achieve an excellent grade compared to White students. Similarly, Francois et al. (2024) used cross sectional quantitative method with 295 students in higher education using several quantitative analyses and a CRT based analysis, and they found several types of distress in Black students which impede their engagement and learning. There are several advantages of utilising quantitative research methods including objectivity with lesser biases compared to other methods, thus makes it possible and easier to make generalisations from findings. They are easily replicable and can make causal, correlational, predictive inferences, among several others. Nevertheless, a major flaw of relying solely on quantitative data is the lack of depth and context as numbers do not present the true nature of the phenomena being measured (Rahman, 2020; Savela, 2018).

Qualitative:

On the other hand, there were two research articles that utilised qualitative research methods in the current review (Arday and Jones, 2022; Corrado and Tang, 2023). Both Arday and Jones (2022) and Corrado and Tang (2023) examined lived experiences through the utility of semi-structured interviews and focus groups. For example, Arday and Jones (2022) study recruited 43 Black participants who were higher education students (n = 25) and academic staff (n = 18) between the ages of 28 and 60. Semi-structure interviews were conducted along with a focus group to examine their lived experience in the terms of the impact of COVID-19. This approach was useful in exploiting in-depth information on the impact of the COVID-19 pandemic, including COVID-19 having links to racism against black students and academics, and lower academic achievements, poorer mental health, racial (re)traumatisation, precarious employment and exploitation, loneliness and isolation among Black students. Similarly, in Corrado and Tang (2023) paper, semi-structure interview and a focus group was used to understand the voices of Black and Asian minority ethnic higher education students post the COVID-19 pandemic. This was useful in informing the recommendation from

findings that higher education institutions and policy makers should provide means of supporting BAME students by addressing the problem of inequalities, access to resources, and to listen to the voices of Black students. Qualitative research flourishes at the shortcomings of quantitative. A major advantage of qualitative data is the rich and in-depth information that provides context and captures subjectivity such as how individuals make sense or meaning out of their experiences. Regardless of such strength, qualitative data can be accompanied by several shortcomings such as researchers' biases, poor ecological validity, problems with generalisation, among others (Rahman, 2020; Savela, 2018).

Mixed-Methods:

Among the ten articles, there were two papers that used a mixed method of research (Kbaier, Kane and Kouadri Mostéfaoui, 2024; Molock and Parchem, 2022). Kbaier, Kane and Kouadri Mostéfaoui (2024) research was sequential where quantitative research was first conducted, and the findings were used to inform the qualitative one (Subedi, 2016; Cameron, 2009). Kbaier et al. (2024) mixed methods produced findings that benefitted from advantages of both qualitative and quantitative methods as well as advantages of using a sequential design. In their mixed method study, they found that BAME students had poorer completion rate, lower grades, poorer mental health, and high discrimination compared to white students during COVID. Whereas Molock and Parchem (2022) study were not sequential as both qualitative and quantitative data were collected together. Using sequential design can improve reliability, validity, efficiency, and with better effect size (Subedi, 2016; Cameron, 2009). Nevertheless, Molock and Parchem (2022) study benefitted from a mixed method and their findings revealed that minority ethnic students experienced poorer finances, mental health, living conditions, academic performance, and higher discrimination. These two research benefit from the "best of both worlds" of qualitative and quantitative data. This provides the advantages of utilising both qualitative and quantitative methods to exploit details, context, lived experiences, and statistical data that are both objective and subjective in nature. In addition, mixed methods are useful in capturing a robust and comprehensive insight of what is being studied (Lund, 2012; Plano Clark, 2017).

Critical race theory (CRT):

The CRT asserts that black communities experience subjugation through systemic racism causing several forms of disparities in health, social economic background, education, and disadvantaged positions among black people (McCluney et al., 2021; Banaji, Fiske, & Massey, 2021). In addition, the CRT argues that scholarship is founded and maintained by the same structure that underpins systemic racism (Zuberi and Bonilla-Silva, 2008). In the current review, not all the papers mentioned the CRT, however they all applied the CRT in the analysis of their data and/or findings (Arday & Jones, 2022; Nguyen, Rienties, & Richardson, 2020; Francois et al., 2024; Nosek, 2023; Kbaier, Kane, & Kouadri Mostéfaoui, 2024; Corrado & Tang, 2023; Molock & Parchem, 2022; Bulman & Fairlie, 2022; Fruehwirth, Biswas, and Perreira, 2021; Wood et al., 2024). For example, Arday and Jones (2022) presented an in-depth analysis of the CRT all through the research reports. They provided a narrative review of CRT and the implications of racism and discriminatory ideologies not only on people from Black communities, but also on black people in higher education settings. In addition, they used the CRT framework in analysing and addressing the disproportionate impact of the COVID-19 pandemic on Black students. Applying the CRT in analysis, they found that COVID-19 impacted on Black students the most due to its links with racism and discrimination. Furthermore, that Black students were most impacted by poorer academic achievements, precarities, exploitations, poorer mental health, and racial (re)traumatisation (Arday & Jones, 2022). Similarly, Francois et al. (2024) examined the impact of COVID on mental health and racial micro aggression in Black university students. They highlighted that there were structural and systemic racism which is also present in higher education settings and campuses leading to devastating effects on Black students in HE. Francois et al. (2024) further explained that structural and systemic racism were exacerbated by the COVID-19 pandemic, leaving a significant number of Black students in COVID distress, worsened mental health, on the receiving end of microaggression, and with negative impact on academic achievements. Other research findings have also echoed this stance; for instance, in an older publication, Zuberi and Bonilla-Silva (2008) argued that scholarship is founded and maintained by the same structure that underpins systemic racism. The existing disadvantaged structure for black communities is particularly

impactful on black students (Arday & Jones, 2022) and the CRT as a theoretical framework tends to alleviate their suffering by challenging narratives that are fastened on stereotypical ideologies and misrepresenting those who have already been victims of racial stigmatisation (DeLeon et al., 2017; López, Erwin, Binder, & Chavez, 2023).

Key Themes

Table showing the development of key themes is shown in appendix 5.

Key findings and Discussions

Theme 1: Covid-19 linked with racism against Black students in HE.

Results from analysis of the literature included in the current review revealed that Covid-19 increased racism against Black students in higher education institutions (e.g., Arday & Jones, 2022; Francois et al., 2024; Nguyen, Rienties, and Richardson, 2020; Nosek, 2023; Kbaier, Kane & Kouadri Mostéfaoui, 2024; Corrado & Tang, 2023; Molock & Parchem, 2022; Wood et al., 2024). For example, Francois et al. (2024) study, “Navigating COVID-19 and racial trauma as a Black student at predominantly White institutions” utilised 295 participants in a cross-sectional survey research design and a CRT based analysis. Their results revealed that COVID distress affected mental health and wellbeing of black students. In addition, there were microaggression which interacted with COVID to have negative impact on black HE students. Such impact includes physical and mental health consequences, hate crime, and negative impact on learning. Similarly, Arday and Jones (2022) investigated the impact of Covid-19 on Black students in higher education to understand disparities of the impact. They found that COVID-19 was linked to racism against black students and academics with causal effects such as lower academic achievements, poorer mental health, racial (re)traumatisation, precarious employment and exploitation, loneliness and isolation. Arday and Jones (2022) argued that racism is structurally embedded in higher education institutions just like it is embedded in the legal system, the media, and other institutions. This is reminiscent of studies have shown that black communities experience subjugation through systemic racism causing several forms of disparities in health, social economic background, education, and disadvantaged positions among black people (McCluney et al., 2021; Banaji, Fiske, & Massey,

2021). In addition, using a CRT, these types of systemic racism embedded in institutions and culture can be explained further with the inception of the Black Lives Matter (BLM) movement which protests systemic racism and social injustices against Black people.

Theme 2: Covid-19 linked to lower academic achievements.

Academic achievement is one of the main focuses of this systematic review. Current findings indicates that Covid-19 had a negative impact on academic achievements such as impacts on grades, retention rates, and engagement with learning (Arday & Jones, 2022; Nguyen, Rienties, & Richardson, 2020; Francois et al., 2024; Kbaier, Kane & Kouadri Mostéfaoui, 2024; Molock & Parchem, 2022; Bulman & Fairlie, 2022; Wood et al., 2024). For example, Arday and Jones (2022) found that COVID-19 was linked to lower academic achievements; this was revealed through the impact of Covid-19 on exacerbated racism, and thus, impact on students' mental health, resulting to lower academic achievements. In addition, Nguyen, Rienties, and Richardson (2020) set out to investigate inequality in behavioural engagement and academic attainment and they found that BAME students were less likely to complete their programme, less likely to pass, or achieve an excellent grade compared to White students. Similarly Francois et al. (2024) explored racial traumas experienced by Black students during Covid-19 and they found that the pandemic impacted student success. Still on the theme academic achievement, Kbaier, Kane and Kouadri Mostéfaoui (2024) study examines the impact of the Covid-19 on Ethnic Minority students, and they found that BAME students had poorer retention rate, completion rate, lower grades when compared to other ethnic groups.

To examine the theme further, in another literature used in this review, Molock and Parchem (2022) investigated the impact of COVID-19 on college students from communities of colour and their experience of racial discrimination. There were 193 participating HE students from diverse ethnic background between the ages of 18 and 25. After several analyses, Molock and Parchem (2022) found that Black students were impacted most by the Covid-19 pandemic in ways such as poorer living conditions, precarious finances, mental health problems, and poorer academic performance. To even make academic performance worse, other factors such as precarious finances, poor living conditions, and mental health interacted with the pandemic to impede learning and access to educational

support, thus impacting negatively on academic performance of Black students. There were other factors that also exacerbate poorer academic performances among Black students, one of these is racial discrimination. Black students experienced significantly more racial discriminations during the Covid-19 pandemic compared to other ethnic groups (Molock & Parchem, 2022). Similarly, Bulman and Fairlie (2022) findings support the current theme that "Covid-19 is linked to lower academic achievements". Bulman and Fairlie (2022) did a big study to understand the link Covid-19 has with lower academic achievements, HE registration, and retention rate, and they found that COVID-19 had impact on retention, completion, and grades; with Black students mostly impacted. On the other hand, Furthermore Wood et al. (2024) intentions were to understand how the Covid-19 pandemic impact on the mental health of higher education students, nevertheless, they found that although Covid-19 impacted the mental health of Black students the most, but that was also a factor that impede their academic achievements.

This finding from the current systematic review that "Covid-19 is linked to lower academic achievement" is supported by other research; several research have shown that systemic racism has subjugated black people in western societies such as the UK and the USA which puts Black people and their communities in disadvantaged social economic situations, poorer physical and mental health, and poorer educational situations (McCluney et al., 2021; Banaji, Fiske, & Massey, 2021). Rather than improvements, these challenges have worsened over the years, and they have been made even worse by the COVID-19 pandemic, thus, have huge impacts of Black students in higher education, especially in the terms of retention rates and their academic achievements (Clabaugh et al., 2021; Fruehwirth et al., 2021; Reyes-Portillo et al., 2022; Arday & Jones, 2022).

These types of research findings have been explained using the CRT that it is because black communities experience racial discrimination and oppression through systemic racism, thus the reason why there are several forms of disparities in health, social economic background, education, and disadvantaged positions among Black people (McCluney et al., 2021; Banaji, Fiske, & Massey, 2021). In their popular study, "*same storm, different boats*", Arday and Jones (2022) demonstrated that the impact of COVID-19 on Black higher education students were based on structural racism and inequalities in higher

education causing huge impact on the academic success of black students. Demonstrating this further, Schucan Bird and Pitman (2020) revealed in their decolonisation study in the UK that there is an under representation of Black academic authors which is made conspicuous in the reading list presented to students in higher education institutions, thus combining with racial discrimination, negatively affect the grades and academic performance of Black students in higher education. This may be why the CRT argues that scholarship is founded and maintained by the same structure that underpins systemic racism (Zuberi and Bonilla-Silva, 2008).

Theme 3: Covid-19 linked to poorer mental health and wellbeing.

The COVID-19 pandemic brought series of lockdowns that impacted on mental health and well-being and the ways higher education institutions are run (Arday & Jones, 2022; Reyes-Portillo et al., 2022). Findings of the current systematic review of literature show that Covid-19 was linked to poorer mental health and wellbeing and that Black student were most impacted (Arday & Jones, 2022; Nguyen, Rienties, & Richardson, 2020; Francois et al., 2024; Kbaier, Kane & Kouadri Mostéfaoui, 2024; Molock & Parchem, 2022; Bulman & Fairlie, 2022; Wood et al., 2024). For example, Arday and Jones (2022) investigated disparities through the application of CRT about the effect of Covid-19 on Black students and black academic staff members in higher education in the USA and the UK. They found that Black students experienced poorer mental health during Covid-19 when compared to other racial groups. Arday and Jones (2022) research demonstrated what they called “pandemic within pandemic”; this term relates to a pandemic of systemic racism in higher education institutions causing the marginalisation of Black people including students. Arday and Jones (2022) research participants narrated that the government and the institutions create a system that marginalises Blacks while normalising white dominance, thus, impacting on the mental health and wellbeing of Blacks. In this light, several studies have supported that the Covid-19 situation caused significant strain, mental distress, and academic difficulties and uncertainties in students (Kecojevic et al., 2020). However, Clabaugh, Duque, and Fields (2021) highlighted that these strains caused by Covid-19 had significantly greater impact on Black students compared to White students.

In another research literature from the current review, Francois et al. (2024) examined COVID-

19 and racial trauma as experienced by Black students. Francois et al. (2024) found that Black students experienced microaggression which was also worsened during Covid-19 pandemic and causing several negative impacts on black HE students such as worsened mental health and wellbeing. It is not clandestine that the prevalence of mental health issues such as anxiety and depression in higher education students have a record upsurge since the arrival of the COVID-19 pandemic (Huckins et al., 2020; Schmits et al., 2021). For instance, psychological distress such as suicidal ideations, depression, and anxiety were significantly higher in HE students (Schmits et al., 2021), however, such COVID-19 related distresses were found in several studies to be disproportionately higher and more prevalent in students from black communities (Rajbhandari-Thapa et al., 2023; Jabbari et al., 2023). An example is Fruehwirth et al. (2021) study that presented data showing that black students experienced significantly disproportionate and higher increase of mental health symptoms such as anxiety and depression. To further support this finding from this review, Jabbari et al. (2023) examined race and mental health during COVID-19, and they also emphasised that black university students experienced higher or deeper “hardships” and precarities that are facilitators of sliding into different mental health problems.

Furthermore, still on the theme “mental health”, Kbaier, Kane and Kouadri Mostéfaoui (2024) investigated the evolving role of COVID-19 BAME students, especially Blacks in the terms of academic achievements and learning experiences in mixed-methods research. They identified challenging experiences of high education students from BAME groups such as disadvantaged housing, socio economic backgrounds, poor employment opportunities, racism, and discrimination.”, Kbaier, Kane and Kouadri Mostéfaoui (2024) highlighted that structural racism is established in several institutions, thus, affecting students’ experiences. Such structural racism evolved radically during the Covid-19 pandemic and was key in the development of psychological and physical stressors that results into mental illnesses, mental health symptoms, and/or poorer wellbeing. This is supported by other studies that have demonstrated that these strains caused by Covid-19 had significantly greater impact on the mental health and wellbeing of Black students as compared to White students (Clabaugh, Duque, & Fields, 2021).

Theme 4 – Covid-19 linked to precarities in Black HE students.

The current review revealed that Covid-19 was linked to several precarities such as in housing, employment, and finances among Black students (Arday & Jones, 2022; Corrado & Tang, 2023; Molock & Parchem, 2022). In this review, Arday and Jones (2022) found that precarities were higher in Black students. Black students were found to experience series of racial injustices that strain their employment opportunities and finances. Similarly, Corrado and Tang (2023) highlighted that the Covid-19 pandemic had huge impact on students in higher education, and that Black students were at the higher end of the impact especially in the terms financial precarities. In addition, while examining the impact of Covid-19 and racial discrimination among Black students, Molock and Parchem (2022) found that Blacks experienced increased discrimination, financial instability and disruptions, poorer living conditions, and poorer career prospects. This is supported by other research findings; these challenges faced by black communities have been exacerbated since the COVID-19 pandemic (Reyes-Portillo et al., 2022; Clabaugh et al., 2021) which has also transcended to black students in higher education (Fruehwirth et al., 2021). Kiebler and Stewart (2022) provided evidence to suggest that most black students come from marginalised black communities whose experience of COVID is coupled by discrimination and social economic precarities.

Theme 5 – Covid-19 linked to loneliness and isolation.

Loneliness and isolation were found to be a common theme in the current review. For example, Arday and Jones (2022) presented evidence that Blacks or students of colour experienced higher isolation and loneliness. Similarly, Nosek (2023) found that Black students in higher education were marginalised and experienced social isolation more when compared with other racial groups. This theme is consistent with wider research that Black students are at greater risk of experiencing loneliness and isolation as a result of Covid-19 pandemic and the lockdowns even though they are already disproportionately at risk of discrimination and the impact of Covid-19 (Bu, Steptoe, & Fancourt, 2020).

Theme 6 - Black students experienced poorer access to learning resources and other support.

Schucan Bird and Pitman (2020) presented evidence to argue the importance of providing

access to adequate learning resources and access to learning support to students in higher education, especially Black students, since they are mostly affected by systemic racial discrimination. In the current systematic review of the literature, it was found that Black student experienced poorer access to learning resources and other learning related support. For example, Nosek (2023) studied the impact of the Covid-19 pandemic on college students with marginalised identities using 983 students from different higher institutions in the USA, and the results revealed that there was poorer support for black students. The poor academic support was worsened by their experience of racial prejudice, discrimination, and systemic racism embedded in institutions. Similarly, in the UK, in an attempt to empower minority ethnic students by finding ways to bridge the BAME divide, Kbaier, Kane, and Kouadri Mostéfaoui (2024) found several challenges encountered by BAME students, especially Blacks: Challenges such as racism, discrimination, biases, and institutional racial prejudice among others. Kbaier, Kane, and Kouadri Mostéfaoui (2024) further found that such challenges were factors that contributed to Black students having poorer access to learning related support.

Still on the theme “poorer access to support”, Corrado and Tang (2023) wanted to understand the voices of Black and Asian minority ethnic students post the COVID-19 pandemic, and to find out whether higher education institutions were actually listening. Corrado and Tang (2023) found that there was poorer access to learning based support with BAME groups, especially Black students. Based on their findings, Corrado and Tang (2023) suggested that higher education, local communities, and policymakers should tackle the problems of inequality faced by BAME students and to listen to the voices of these disadvantaged students. Corrado and Tang (2023) study have shown inadequate mental health support for BAME students and poorer access to learning resources. In addition, Molock and Parchem (2022) presented a compelling argument while studying the impact of COVID-19 on college students from communities of colour that minority ethnic students in higher education institutions experienced poorer support.

Conclusion

COVID-19 has impacted disproportionately on black students in higher education (Arday & Jones, 2022; Kiebler & Stewart, 2022; Garcia et al., 2021; Moore et al., 2022). COVID-19

pandemic brought world-wide transformations that were accompanied by several forms of precarities and mental health problems (Arday & Jones, 2022; Rogers, 2021; Li & Wang, 2020). Data have suggested that Covid-19 had worsened impact on Black ethnic groups and their communities (Webster et al., 2020; Zhou & Kan, 2021; Arday & Jones, 2022). Such disparities in COVID-19 impact on Black people pose adverse effects on Black students in higher education (Arday & Jones, 2022). Most black students come from deprived or marginalised black communities whose experience of COVID is coupled by social economic precarities, health inequalities, and discrimination, consequently impacting significantly on their academic journeys and learning (Kiebler & Stewart, 2022). Consequently, the current systematic review examines the impact of COVID-19 on black students in higher education. In doing so, it applies the critical race theory to provide insights on reducing racial disparities and to improve outcomes for black students in higher education. The CRT was used to examine the disproportionate impact of the COVID-19 pandemic on black students in higher education to provide insights on disparities in health outcomes, learning, and academic development.

The results were based on 6 themes that re-emerged across literatures included: (1) Covid-19 was linked with racism against Black students in HE; (2) Covid-19 was linked to lower academic achievements of Black students; (3) Covid-19 was linked to poorer mental health and wellbeing of Black students; (4) Covid-19 was linked to precarities in Black HE students; (5) Covid-19 was linked to loneliness and isolation; and (6) Black students experienced poorer access to learning resources and other support.

Most of the analysis from the literatures in this review were done through the lens of the CRT. Findings from this review support the concepts within the CRT, for example, results revealed that Covid-19 increased racism against Black students in higher education institutions (e.g., Arday & Jones, 2022; Francois et al., 2024; Nguyen, Rienties, and Richardson, 2020; Nosek, 2023; Kbaier, Kane & Kouadri Mostéfaoui, 2024; Corrado & Tang, 2023; Molock & Parchem, 2022; Wood et al., 2024). The CRT asserts that black communities experience suppression and inequalities through systemic racism causing several forms of disparities in health, social economic background, education, and disadvantaged positions among black people (McCluney et al., 2021; Banaji, Fiske, & Massey, 2021). In addition, Covid-19 was linked to poorer

mental health and wellbeing and Black student were most impacted (Arday & Jones, 2022; Nguyen, Rienties, & Richardson, 2020; Francois et al., 2024; Kbaier, Kane & Kouadri Mostéfaoui, 2024; Molock & Parchem, 2022; Bulman & Fairlie, 2022; Wood et al., 2024). Furthermore, it was found that Black student experienced poorer access to learning resources and other learning related support (Nosek, 2023; Kbaier, Kane, & Kouadri Mostéfaoui, 2024). From the perspective of the CRT, these are substantial evidence that scholarship is founded and maintained by the same structure that underpins systemic racism (Zuberi and Bonilla-Silva, 2008). For example, applying the CRT in analysis, Arday and Jones (2022) found that COVID-19 impacted on Black students the most due to its links with racism and discrimination. These adverse experiences were key in impacting on poorer academic achievements of Black students in higher education. Current findings indicates that Covid-19 had a negative impact on academic achievements such as impacts on grades, retention rates, and engagement with learning (Arday & Jones, 2022; Nguyen, Rienties, & Richardson, 2020; Francois et al., 2024; Kbaier, Kane & Kouadri Mostéfaoui, 2024; Molock & Parchem, 2022; Bulman & Fairlie, 2022; Wood et al., 2024).

Evaluation of findings

The current systematic review of the literature produced important findings that demonstrated that Covid-19 was linked with racism against Black students, poorer mental health and wellbeing of Black students, precarities in Black students, loneliness and isolation, and poorer access to academic related support in Black student. These were key in lower academic achievements of Black students in higher education. A strength of this review is that the findings are consistent with several theories and frameworks from other studies. The impact of Covid-19 shown in this review has been echoed by several studies that scholarship is founded and maintained by the same structure that underpins systemic racism (e.g., Arday & Jones, 2022; DeLeon et al., 2017; López, Erwin, Binder, & Chavez, 2023).

Limitations

Despite the robust findings in the current review, there are some limitations; such limitations are usually consistent with using systematic literature review as a method. Some of the constraints include the risk of biases in terms of the selection of research papers and the interpretation of findings (Owens, 2021). In addition, another

limitation of the current review is that, although, the quality of the statistical data was assessed visually through their analytical methods, however, it was difficult to assess the quality of the dataset of both the quantitative and qualitative dataset. Finally, there was no assessment of possible researchers' biases or misinterpretation of findings in the included literature.

Importance of findings

The findings from the current systematic review of the literature are vital in informing research and educational practice. Since there is evidence of structural or systemic racial discriminations embedded in institutions, this necessitates the need for intervention approach by higher education institutions, local communities, and policy makers to provide means of supporting

Black and other minority ethnic students by addressing the problem of inequalities, access to resources, and to listen to the voices of Black students. Another way to address the importance of these findings is the concept of decolonisation. For instance, Schucan Bird and Pitman (2020) revealed in their decolonisation study in the UK that decolonisation in academic systems and the eradication of structurally racist, discriminative, or prejudicial systems would improve the academic experience of Black students in higher education institutions, thus having better impact on their grades, retention, and academic performance.

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Appendix 1: PICO for review questions.

Full review question	
<ul style="list-style-type: none"> • What is the impact of COVID-19 on black students in higher education? 	
Population	To be included: Black students in higher education, age 18 and above, and all gender types.
Intervention	<ul style="list-style-type: none"> • Critical race theory. This may provide understanding into systemic failure of black students in higher education and provide insights into how to support such students. • Policy changes.
Comparison	
Outcome	<p>Change in policy to elimination systemic failure of black students in higher education.</p> <p>Improvements in wellbeing, retention rate, academic achievements in black students in higher education post COVID-19 pandemic.</p>

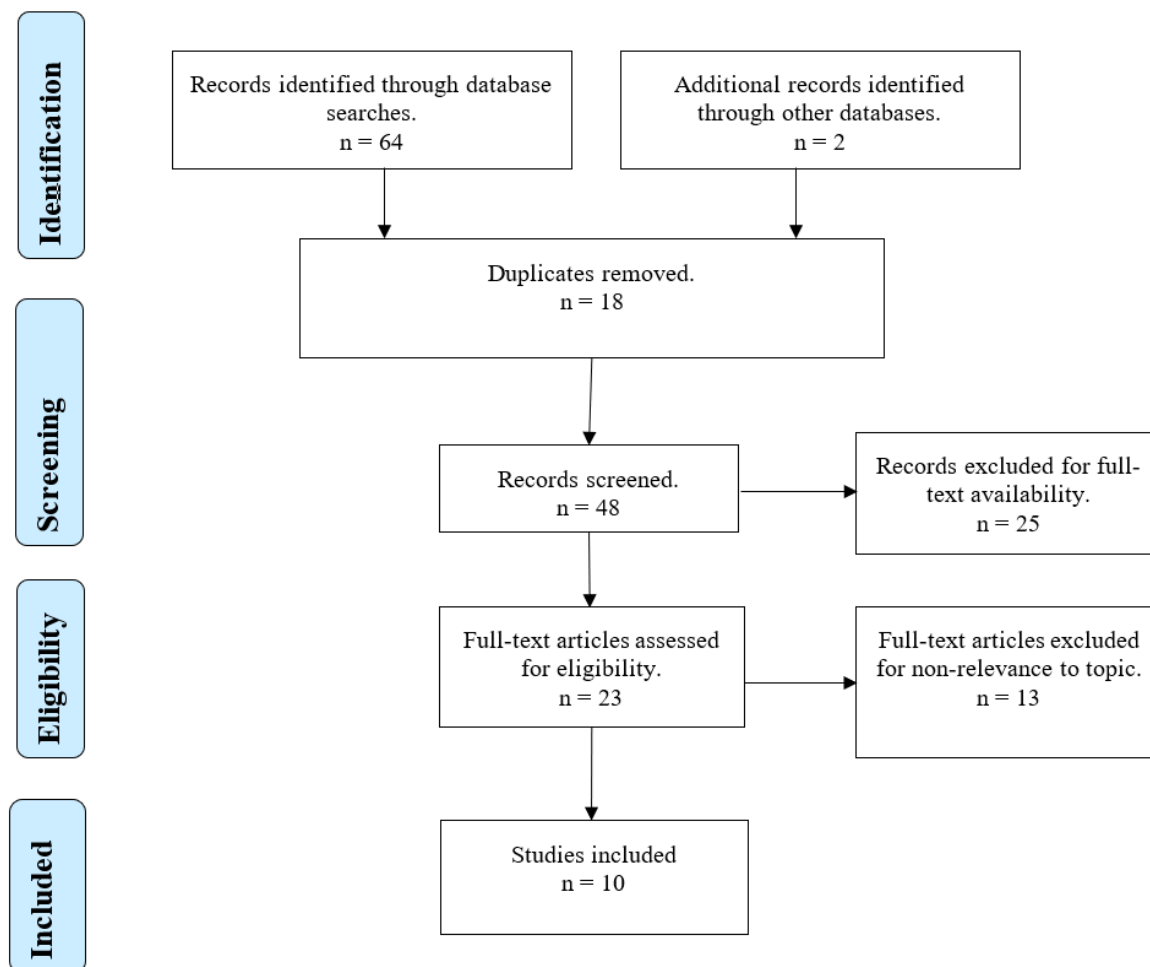
Appendix 2: Search terms and limiters

	Search terms	Limiters/Expanders	Last Run Via	Results
S1	(COVID-19 pandemic * OR Coronavirus) AND (Black students in higher education *).	Limiter – published date: From January 2020 to date. Limiter - Paper type: Literature reviews and editorials.	Interface: Cochrane Library PubMed – MEDLINE - Embase – ICTRP – CINAHL Plus – Scopus – Google Scholar –	25
S2	(COVID-19 pandemic * OR Coronavirus) AND (Ethnic disparities * OR Black university students).	Limiter – published date: From January 2020 to date. Limiter – published date: From January 2020 to date. Limiter - Paper type: Literature reviews and editorials.	Interface: Cochrane Library PubMed – MEDLINE - Embase – ICTRP – CINAHL Plus – Scopus – Google Scholar -	23
S3	(COVID-19 pandemic * OR Coronavirus) AND (Black College students * OR BAME university students).	Limiter – published date: From January 2020 to date. Limiter – published date: From January 2020 to date. Limiter - Paper type: Literature reviews and editorials.	Interface: Cochrane Library PubMed – MEDLINE - Embase – ICTRP – CINAHL Plus – Scopus – Google Scholar -	18

Note: S1 = Search terms 1, S2 = Search terms 2

Appendix 3: PRISMA Flow Diagram

(Adapted from Moher et al., 2009).



Appendix 4: Summary of evidence table

Author, Year and Location	Aim of the research	Methodology/methods	Key Findings (strengths/weaknesses)
Arday and Jones (2022). The USA and the UK.	To investigate disparities through the application of CRT about the effect of Covid-19 on Black students and black academic staff members in higher education in the USA and the UK.	<ul style="list-style-type: none"> • Semi-structured interviews. • Focus groups. • The analytic procedure was determined through a CRT conceptual framework. 	COVID-19 was linked to racism against black students and academics with causal effects: Lower academic achievements, poorer mental health, racial (re)traumatisation, precarious employment and exploitation, loneliness and isolation.
Nguyen, Rienties, and Richardson (2020). Milton Keynes, UK.	To investigate student achievement gap through the analysis of engagement disparities and academic performance in different ethnic groups during Covid-19 pandemics.	This was quantitative research that used various statistical analyses and models.	BAME students were less likely to complete their programme, less likely to pass, or achieve an excellent grade compared to White students.
Francois, Blakey, Stevenson, Walker, and Davis Jr (2024). The USA.	To examine the impact of COVID on mental health and racial micro aggression in Black university students.	A cross-sectional survey research design. Quantitative research with several statistical models. A CRT based analysis.	COVID distress affected mental health and wellbeing of black students. Microaggression interacted with COVID to have negative impact on black HE students.
Nosek (2023). Colchester, VT, USA.	To investigate of COVID on college students with marginalized identities.	Quantitative research based on online survey from 38 HE institutions in the USA.	Blacks or students of colour experienced poorer wellbeing, isolation/loneliness, perceived stress, discrimination.
Kbaier, Kane and Kouadri Mostéfaoui (2024). Milton Keynes, UK.	To investigate the impact of Covid on the learning and academic achievements in minority ethnic groups.	The study utilised mixed-methods of quantitative research and focus groups.	BAME students had poorer completion rate, lower grades, poorer mental health, and high discrimination compared to white students during COVID.
Corrado and Tang (2023). London, England.	To examine the lived experiences, mental health, emotional stress, access to learning resources and funding.	A qualitative study using semi-structured interviews and focus groups.	Inadequate mental health support for BAME students in HE. They also experienced poorer access to learning resources.

Author, Year and Location	Aim of the research	Methodology/methods	Key Findings (strengths/weaknesses)
Molock and Parchem (2022). Washington, DC., USA.	The study assesses the impact of COVID on mental well-being and experiences of racial discrimination in ethnic minority college students.	A cross-sectional design. Qualitative and quantitative.	Minority ethnic students experienced poorer finances, mental health, living conditions, and academic performance. They also experienced higher discrimination.
Bulman and Fairlie (2022).	To investigate the impact of COVID-19 on college enrolment and student success.	Quantitative study.	COVID had impact on retention, completion, and grades, and minority ethnic group such as blacks were mostly impacted.
Fruehwirth, Biswas, and Perreira (2021).	To investigate the effect of COVID on mental health of HE students.	Quantitative research with survey materials.	Covid was linked to mental health of students. Black students experienced significantly higher depression.
Wood, Yu, Sealy, Moss, Zigbuo-Wenzler, McFadden, ... and Brace, (2024).	To examine the impact of the COVID pandemic on HE students.	Quantitative research with survey materials.	Black students experience higher mental health as a result of the COVID pandemic.

Appendix 5: Table of Themes.

	Arday and Jones (2022).	Nguyen, Rienties, and Richardson (2020).	Francois, Blakey, Stevenson, Walker, and Davis Jr (2024).	Nosek (2023).	Kbaier, Kane and Kouadri Mostéfaoui (2024).	Corrado and Tang (2023).	Molock and Parchem (2022).	Bulman and Fairlie (2022).	Fruehwirth, Biswas, and Perreira (2021).	Wood et al. (2024).
Theme 1 – Covid-19 linked with racism against Black students in HE.	Black students experienced racism in HE. There was racial (re)traumatisation with Black students.	Inequalities affect Black students.	Microaggression interacted with COVID to have negative impact on black HE students.	Blacks or students of colour experienced discrimination.	BAME students experienced high discrimination.	Experience of racism in Blacks students	Minority ethnic students experienced high discrimination.			Experience of racism in Black students.
Theme 2 – Covid-19 linked to lower academic achievements.	COVID-19 was linked to lower academic achievements.	BAME students were less likely to complete their programme, less likely to pass, or achieve an excellent grade compared to White students.	Impact on student success.		BAME students had poorer completion rate, lower grades.		Minority ethnic students had lower academic performance.	COVID had impact on retention, completion, and grades; with Blacks mostly impacted.		Reduced academic achievements.
Theme 3 – Covid-19 linked to poorer mental health and wellbeing.	Black students experienced poorer mental health during Covid-19.		COVID distress affected mental health and wellbeing of black students.		BAME students had poorer mental health.	Black students experienced mental health.	Minority ethnic students experienced poorer mental health.		Black students experienced significantly higher depression.	Black students experience higher mental health as a result of the COVID pandemic.
Theme 4 – Covid-19 linked to precarities in	Precarities were higher in Black students.					Higher financial precarities in Black students.	Minority ethnic students experienced poorer finances			

Black HE students.							and living conditions.			
Theme 5 – Covid-19 linked to loneliness and isolation.	There was higher loneliness and isolation with Black students.			Blacks or students of colour experienced poorer isolation/loneliness and perceived stress.						
Theme 6 - Black students experienced poorer access to learning resources and other support.				Poorer support for black students.	Poorer access to support.	Inadequate mental health support for BAME students and poorer access to learning resources.	Minority ethnic students experienced poorer support.			