

The Same But Better: Why Some Black Girls Prefer Virtual Learning

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Black girls' intersectionality of race and gender puts them in double jeopardy of experiencing both racial and gender discrimination in brick-and-mortar school settings. Virtual classrooms do not completely extinguish the fires that threaten to incinerate Black girls' academic and personal growth, but for many Black girls, the advent of mass remote learning created a safe haven, fueling their confidence to address maltreatment experienced in school. Employing theoretical underpinnings of critical race feminism, this study confirms that some Black girls prefer virtual learning over traditional schooling due in part to feelings of greater physical and emotional safety when online versus on campus. This is significant because since virtual learning clearly has a positive impact on some Black girls' feelings of safety and empowerment, and their social and emotional growth, schools must consider utilizing virtual learning in more intentional ways to promote education equity and academic and personal success for Black girls.

Keywords: Black girls, virtual learning, intersectionality

When a social media group comprised of more than 10,000 Black parents of children from pre-K to 12th grade was asked what they like about virtual schooling, respondents “overwhelmingly said they appreciated the way virtual learning allowed them to shield their children from anti-Black bias and protect them from the school-to-prison pipeline” (Anderson, 2020, para. 9). One study noted that Black girls in particular experience bias treatment and that they attribute their mistreatment to racism fueled by their White teachers’ biased views (Froyum, 2010) and to stereotypes of being loud and disrespectful when attempting to express their needs and opinions (Morris, 2016), which ultimately leaves them “feeling unsupported in their academic pursuits” (p. 52). In addition to a disconnect with teachers, Black girls are subjected to more harassment, disrespect, and exclusion by peers for reasons ranging from the aggressive and sexualization of Black girls (Young et. al., 2018) to how they style their hair (O’Brien-Richardson, 2019). Ultimately, “Black girls are uniquely marginalized in educational contexts based on race and gender” (Leath et. al., 2019, p. 1341). The historic disregard of Black girls’ experiences at the intersection of various education phenomena has not been abated in the abundance of recent research about the recent pandemic and ensuing interruption of in-person schooling in favor of virtual learning. The current study addresses this negligence via a case study that provides in-depth exploration of the fully online versus in-person experiences of 13 K-12 African American girls.

In traditional school settings, Black girls often face daily macro- and micro-aggressions that impede their academic and social growth. While virtual classrooms do not completely extinguish the fires that singe and threaten to incinerate Black girls’ academic and personal growth, for many Black girls the advent of mass remote learning brought on by the pandemic has created a safe haven that, at the very least, allows them to have more boldness and agency when addressing bias and racism in the schools they attend.

Research on how the virtual environment has rendered this population “liberated from hearing negative tropes about Black girls in the lunchroom and hallways” (Anderson, 2020, para. 4) is scant. In addition to contributing scholarship to the meager research on this topic, this study seeks to advance understanding of why some Black girls prefer virtual learning by magnifying the voices of Black girls’ who do not want to return to traditional schooling and illuminating why they would rather sit behind a screen than in front of a classroom.

Employing theoretical underpinnings of critical race feminism, emotional intelligence, and school climate, we investigate the following questions: 1) How has virtual learning impacted the social, emotional, and academic growth of Black girls? 2) How does the virtual learning environment uniquely impact Black girls in regard to feelings of safety and empowerment?

BACKGROUND/LITERATURE REVIEW

Black Girls in Traditional School Settings

Black girls remain undereducated and over-adjudicated due to the long-standing school-to-prison pipeline. According to the Office of Civil Rights, 12% of Black girls compared to only 2% of White girls are subjected to exclusionary discipline practices in U.S. public schools (U.S. Department of Education Office for Civil Rights, 2014). These practices lead to estimated learning loss that far exceeds what was observed due to the COVID-19 pandemic (Losen & Martinez, 2020). Consequently, for many Black girls, face-to-face educational settings are not only less effective but can be detrimental to their identity, self-efficacy, and academic achievement.

As a result of racism and sexism, Black girls face significant challenges in terms of their social, emotional, and academic well-being. Although Black girls are uniquely resilient; the social and emotional toll of U.S. schooling practices leads to academic struggles that are largely absent from the current academic and popular literature. Unlike White girls whose fragility frequently provides an unjustified level of overprotection from mental, physical, and emotional pain, Black girls are constantly bombarded with targeted attacks against the core of their humanity.

With a keen understanding of this phenomenon as a result of experiential knowledge, it is often proffered that Black mothers “raise their daughters and love their sons.” In this saying, raising their daughters suggests that Black mothers better prepare their daughters for the challenges and eventualities they will face as Black girls and women in U.S. society (Varner & Mandara, 2014). One of these eventualities is disparate and often negative treatment by those in authority or supervision. Teachers, school administrators, and school resource officers are often the most notorious perpetrators, as evidenced by the many viral accounts of Black girls receiving harsh discipline that often reflects physical and emotional abuse. The maltreatment of Black girls, unfortunately, begins early and is observed consistently within the U.S. educational system; thus, Black parents, especially mothers, tend to instill self-reliance and staunch resilience in their daughters (Collins, 1987; Staples & Johnson, 1993) which leads them to exhibit non-traditional gender socialization patterns. These gender socialization patterns, however, are paradoxical as they often can either elevate or escalate many interactions between Black girls and schools due to cultural discontinuity that can exist between the Black girls and White educators.

Black Girls and Virtual Learning

Historically, traditional schools have not always been places that respect or value Black youth. The interdependent challenges of racism and sexism often make the classroom especially difficult for Black girls (Morris, 2016) who “occupy distinct social positions in the United States, in part as a result of gendered racial stereotypes leading to differential discriminatory treatment within educational contexts” (Leath et al., 2019, p. 1319). According to numerous reports (Anderson 2020; Brown, 2021; Miller, 2021; Newberry & Blume, 2021), however, for some Black students and their families “the distance-learning environment has brought an unexpected benefit: They can evade the biases and institutionalized racism often found in a traditional classroom setting” (Brown, 2021). In essence, the computer screen may provide a protective barrier between this vulnerable population and the biased treatment that threatens their personal and academic growth and development.

Even though virtual learning may buttress against certain mistreatment and microaggressions, Copur-Gencturk et al. (2022) note that even in virtual classrooms, k-12 teachers “seem to rely on stereotypes when recommending students for advanced learning or for special education services” (p. 13). The authors also state the following:

Teachers in virtual classrooms are faced with making consequential decisions based on more limited information about student engagement and learning than when in face-to-face settings. When teachers make decisions based on limited information, they may be more likely to take mental shortcuts and rely on automatic judgments based on social stereotypes. Such implicit biases can influence teacher decision-making, including gender- and race-based grading decisions (pp.1-2)

Hence, whether the milieu is brick-and-mortar or virtual, Black girls’ very being makes them twice as likely to experience bias based on their identity descriptors.

Clearly, school context and environment play an important role as a third teacher (Biermeier, 2015), social arena, and motivational tool for students. However, according to Butler-Barnes et al. (2021), “less is known about the types of school environments that Black girls perceive as supportive or hindrances to their educational performance” (p. 28), as well as their social and emotional stability. Thus, when searching Web of Science, using various combinations of *virtual learning*, *online learning*, *B/black students*, *African American students*, *B/black girls*, and *B/black female students*, it was no surprise that very little research was found on the topic of Black girls

and virtual learning. In fact, the search yielded only 8 results; and after review of each, only one proved even remotely relevant, stating that teachers' race related implicit biases might be more likely to emerge when interacting face-to-face, potentially "influencing how much race/ethnicity minority students attending school in-person felt connected to school" (Fisher et al., 2022). Nevertheless, African American students and their parents are speaking up through internet forums and social media platforms; but even those narratives are rarely specific to Black girls.

Black Girls and Agency

Discussions of student power are often examined through the term *student agency*. Student agency is the learner's ability, will, and skill to act upon, influence, and modify events and circumstances to meet the learner's needs (Mameli et al., 2021; Rajala et al., 2016). Vaughn (2020a) based the understanding of agency on theoretical orientations and conceptualized them as students' dispositions, motivations, and positionalities. Therefore, the construct of student agency is interactive and includes multiple and complicated social processes that occur daily in the classroom (Grazia et al., 2021). However, because of structural inequalities in schools, students often do not have student agency, especially students living in poverty, students of color, and students whose home language is not English (Donner & Shockley, 2010; Flores & Rosa, 2015; Leeman, 2018).

The goal of Black students' agency is to counter marginalizing depictions and deficit thinking (Williams et al., 2020). Williams et al. (2020) define Black student agency as "Black students' capability to critique the larger education enterprise as being imbued with a specific anti-Black racial bias and acting in ways that disrupt such institutionalized racial biases" (p. 255). Therefore, Black student agency should be interpreted as how students emphasize their Blackness as a crucial strength to their success (Williams et al., 2020).

Carter Andrews et al. (2019) found limited awareness of Black girls' specific struggles. They also stated many classrooms are toxic and traumatizing places for Black girls. Often Black girls' agency is oppressed in the classroom or seen negatively (Lambooy et al., 2020; Wun, 2016) due to negative stereotypes of Black girls as aggressive and disrespectful. Once again, the silencing of Black girls' is two-fold in that they are once hushed due to racial discrimination and then again due to discriminatory gender norms that restrict their voice and agency.

Black Girls' Safety and Empowerment in Divergent School Contexts

Although there is scholarship that explores the school-to-prison pipeline, research has shifted to examine the ways that schools are prisons or what is termed the “school-prison nexus” (Butler, 2022; Skiba et al., 2014). Researchers have documented numerous factors that contribute to disparities in school discipline for Black girls. These factors include student-teacher relationships, zero tolerance policies, sanctions for minor infractions (chewing gum or having natural hair), deficit thinking, and white supremacy (Turner & Young, 2022; Young & Butler, 2018). Yet, the parallels between teaching and policing remain ever present and have tremendous implications on the schooling of Black girls. Police officers and teachers garner a great deal of autonomy through the power of discretionary enforcement practices, however much of the power afforded to teachers was removed during the COVID-19 pandemic as students were allowed to attend school virtually. We theorize that teachers lost this power and thus Black girls were able to engage and enjoy school without these unnecessary challenges. Learning environments, both virtual and traditional, provide disparate opportunities for Black girls to experience safety and empowerment within educational spaces; yet, to our knowledge the present study is the first to examine the virtual learning experiences of Black girls, specifically.

THEORETICAL FRAMEWORK

We used Critical Race Feminism (CRF) as our theoretical framework for this study. Because race and gender are not mutually exclusive nor simply additive, the intersection between them is crucial to understanding Black girls' experiences in a virtual learning environment. Due to the complexity of the interactions and associations between race and gender CRF scholarship necessitates a multidisciplinary approach to research and practice. There is an affinity for social justice at the core of CRF, which is illustrated by its methodology, which promotes the political, social, and economic developments needed to benefit the populations (Few, 2007). According to Berry and Mizelle (2006), multiple identities and intersectionality are necessary for the practical application of CRF. Thus, researchers should pay particular attention to how multiplicity and intersectionality are manifested throughout the research and discovery process when applying the CRF framework.

Within communities afflicted with issues of racial inequality, the CRF framework can help examine how racial oppression can undermine gender oppression (Berry & Mizelle, 2006). For Black girls, issues of racial oppression have historically overshadowed issues of gender oppression as evidenced by the use of all Black students as a proxy for issues related to Black

girls historically (Young, 2020). However, CRF works to highlight the situations of women of color by debunking the idea that there is an essential female voice that speaks for all women. Critical race feminism can guide future research on Black girls' educational experiences because CRF (1) as a theoretical lens and movement purports that women of color's experiences, thus perspectives, are different from the experiences of men of color and those of White women; (2) critical race feminism focuses on the lives of women of color who face multiple forms of discrimination, due to the intersections of race, class, and gender within a system of White male patriarchy and racist oppression; (3) critical race feminism asserts the multiple identities and consciousness of women of color (i.e., anti-essentialist); (4) critical race feminism is multidisciplinary in scope and breadth; and (5) critical race feminism calls for theories and practices that simultaneously study and combat gender and racial oppression (Evans-Winters & Esposito, 2010, p.).

The classroom and subsequent K-12 experiences of Black girls and Black boys are not the same, yet the literature consistently fails to disaggregate school-level data by race and gender. This lack of data disaggregation is problematic as Crenshaw (1989) concluded that females of color have lived experiences that influence their identity as a woman as well as their existence as people of color. The virtual learning experiences of Black girls must be examined holistically in order to capture the unique perspective that the intersection of race and gender will provide. Black girls are subject to various types of systemic and systematic discrimination because of their race and gender.

According to King (1988), Black girls experience "multiple jeopardy" due to racism, sexism, and class oppression in the United States. CRF recognizes these three factors are particularly pertinent to the Black female student experience and thus essential to the examination of the Black female virtual learning experience. The "multiple jeopardy" partially explains the multiple identities and consciousness of thought that Black girls exhibit. Still, other factors are necessary to building a more encompassing model of these multiple existences. Finally, the multidisciplinary nature of CRF research asserts that the intersection of race and gender in education requires the intersection of multiple epistemologies to collect, examine, and interpret the data. Thus, we posit that by using CRF as a theoretical framework, it is possible to explore how race and gender impact the virtual learning experiences of Black girls.

METHODS AND DESIGN

Our methods and design are formulated to guide us in answering the research questions, allow us to effectively contribute to the field of learning and instruction, and position us to break the cycle of precluding research on Black girls' experiences at the intersection of various education phenomena.

Narrative inquiry is the method used to conduct this research. The narrative approach weaves together events and experiences, often from a very small number of individuals, to form a cohesive story that is then shared and, hopefully, encourages others with similar experiences to raise their voices. The process of storytelling is a central component of narrative inquiry, a qualitative method of research first used by Connelly and Clandinin (1990) to describe teachers' personal stories. This research method allowed us to consider the narratives of 13 k-12 African American girls and conduct an in-depth exploration of their virtual versus in-person learning experiences.

Furthermore, the pairing of narrative inquiry as method and critical race feminism as theoretical frame allowed us to do research that Nadar (2014) calls "an epistemological value of feminist thinking, particularly Black feminist thinking, from which other researchers can learn" (p. 21). When framed by CRF, narrative inquiry can highlight the unique experiences of historically marginalized groups (e.g., Black girls)—whose race and gender work together in constructing social inequality—in rather common situations (e.g., virtual, and in-person schooling).

The research design followed customary steps in conducting narrative research. Figure 1 outlines this design.

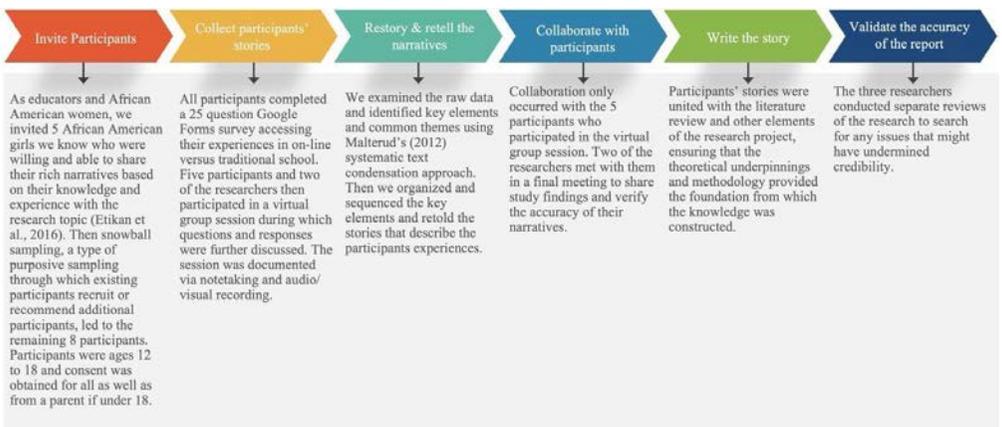


Figure 1. Narrative Research Steps as Applied to the Current Research.

Narrative inquiry is a powerful tool in the sharing of embodied knowledge, knowledge that is shared through stories, which are valid forms of data (Rice, 2022).

DATA ANALYSES

Malterud's (2012) systematic text condensation approach was used to analyze data because this technique is advantageous for allowing researchers to discover, analyze, and restore critical themes that emerge during examination of information gathered during narrative research.

The two researchers who participated in the virtual group session with participants separately read the 55 pages of transcript and the responses to the open-ended survey form questions to gain "a general impression of the whole, looking for preliminary themes" (Malterud, 2012, p. 796) associated with participants' experiences in virtual and in face-to-face school. Thus, research texts from participants' narratives gave rise to themes (Craig, 2013). Both researchers then read the transcript and responses a second time, being more intentional in finding meaning units that spoke to the research questions. Still working individually, the researchers then assigned codes to the meaning units. This completed the first two steps—total impression and identifying and sorting meaning units—of Malterud's 4-steps process. Next, the researchers compared their first impression, themes, and codes, with the goal of "negotiating confluent and diverging issues" (p. 797). However, we found ourselves to be in agreement, only differing in the language chosen to represent certain phenomena; for example, where one researcher coded students behind the computer confidence as *bold empowerment*, the other coded the same experiences as *agency*.

Together, the researchers moved on to step three, condensation, in which we sorted agreed upon code groups into subgroups and gave focus to ones that spoke to the research questions. Finally, we put the pieces together again, synthesizing the data (step 4) into a collective retelling of participants' narratives.

FINDINGS

The findings of the data analysis based on Malterud's systematic text condensation approach are shown in Table 1. Additionally, Figure 2 shares the survey findings of multiple choice questions that speak directly to certain aspects of the research questions—specifically, how has virtual learning impacted the social and emotional growth of Black girls, and how does the virtual learning environment uniquely impact Black girls in regard to feelings of safety.

Table 1

Malterud's Systematic Text Condensation Approach Applied to Current Study

Theme: Autonomy in virtual learning		
Code	Condensation	Synthesizing
Individualized pacing	I can work at my own pace and create my schedule. I can work ahead if I want. I feel powerful because I can do my own thing. I can finish when I want and relax when I want. I can work and also enjoy my house. I am also able to do my schoolwork anywhere.	While self-paced learning has its supporters and opponents, participants overwhelmingly announced the freedom to work at their own pace as their most salient reason for preferring virtual learning. The sovereignty to work ahead when ready or spend more time on a concept when unsure was viewed as "powerful." Furthermore, Black girls are suspended at higher rates (12%) than girls of any other race or ethnicity and most boys (Osher et al., 2015). According to the United States Commission on Civil Rights (2011), "accurate pacing and attention to the appropriate difficulty level of instructional material result in many fewer behavior problems, many of which result from boredom with already-learned material or frustration at being presented with material that is too difficult" (p. 3). Thus, in this way, virtual learning uniquely impacts Black girls in relation to feelings of empowerment— power over their time and their future.
Theme: Safety behind the screen		
Code	Condensation	Synthesizing
Emotional shield	When I went to school online, I could be heard before I was seen. During in-person classes, students have called me the "n" word, but that has not happened online. I don't have to worry about comments made about my appearance. I feel more confident in an online environment.	Many scholars agree that positive racial identity can be a "protective and promotive" factor (Rouland, 2017) of social and emotional well-being as well as achievement-related outcomes for students of color (Sellers et al., 2003; Wong & Rowley, 2001). The social, emotional, and academic growth and development of Black girls is impacted by not only their racial identity but also their gender identity. Dealing with racial slurs and micro- and macroaggression due to their skin color is compounded by verbal attacks and discrimination based on the criminalization of Black girls' bodies, hair, and ways of dress. Being on-line keeps Black girls from being on display.

Table 1, *Continued*

Theme: Safety behind the screen (continued)		
Code	Condensation	Synthesizing
Physical safety	I felt safer during virtual schooling. I did not have to worry about anyone hurting me or messing with me.	Whether concerned about peers “messing” with them or other possibilities of “something bad happening” or “getting hurt at school,” most participants voiced feeling much safer at home than at school. From bullying to school shootings, our current generation of school children experience much anxiety and fear for their safety when they enter school buildings across our nation. Black girls’ feelings of safety and emotional well-being are uniquely impacted in that girls are more often bullied than boys (Rutgers, 2019) and while Black students represent only about 15% of the total K–12 school population in America, they make up 30% of the average population at schools that have been impacted by a fatal shooting” (Everytown, 2022).
Agency	I feel safer making comments with my screen off. When I had harmful incidents happen when I was online, I would speak up, but if the same thing occurred when I was face to face, I would have just walked out of the classroom.	Social media has been the catalyst for multiple studies about PC bravery but being behind the computer screen has also helped some students to find their voice when being verbally attacked in their virtual classroom. Although student agency is usually associated with students’ active voice in their learning (Vaughn, 2020b), it can also relate to students’ ability to take action when their learning is being interrupted by various kinds of ill-treatment (Wun, 2016). Knowing they are more likely to be held responsible or be suspended, Black girls may hold their tongue or walk away when in traditional school. Virtually, however, some have discovered their own agency and choose to stand up for themselves by “speaking up” instead of logging off.

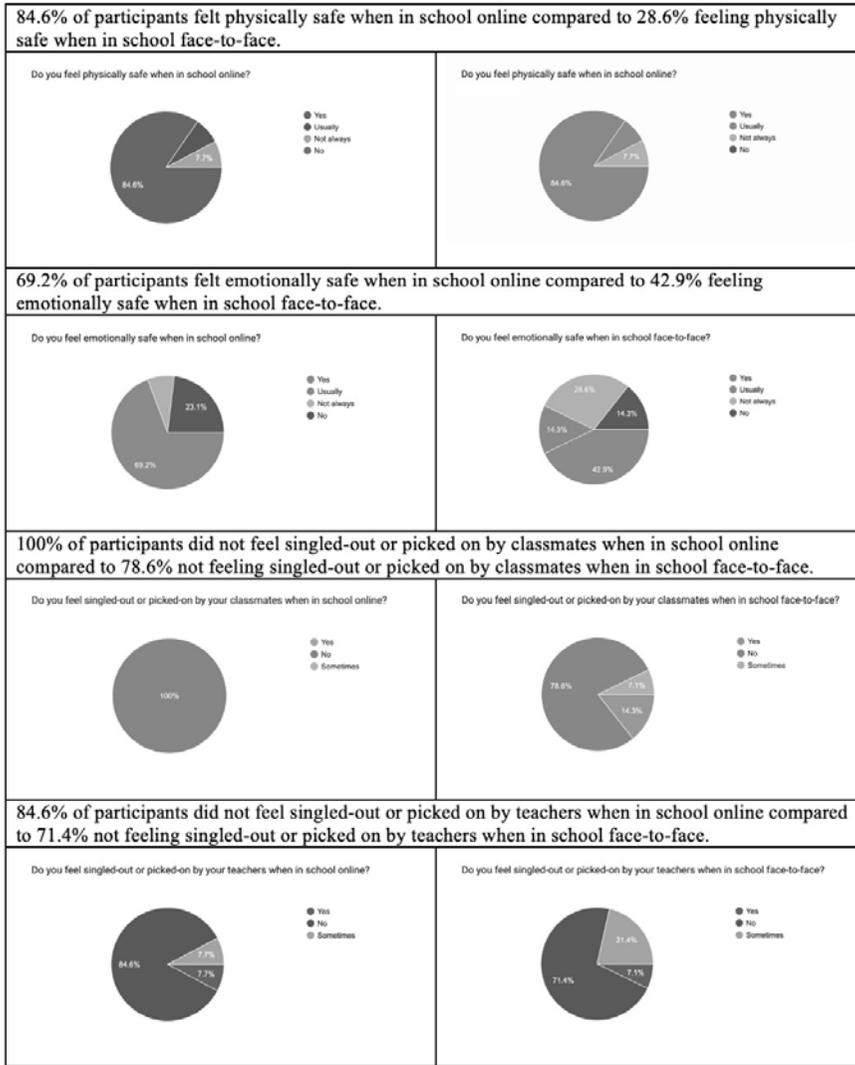


Figure 2. Survey Results About Feelings of Physical and Emotional Safety and Feelings of Being Singled-out or Bullied by Peers and by Teachers in Face-to-Face vs. Virtual Classroom Environments.

Employing Malterud's systematic text condensation approach, we have most thoroughly discussed findings within the synthesizing column of Table 1. We must also note that while all participants appreciated the individualized pacing associated with virtual schooling, only one participant commented that her highest grades were earned while in the virtual setting; and two participants specifically noted that their grades "weren't bad" during online learning, but they were better when physically in school. Additionally, we found that while most participants liked learning virtually, several commented that they missed their friends and extracurricular activities.

DISCUSSION

The virtual learning environment distinctively affected Black girls. First, our findings suggest that Black girls enjoyed the autonomy available through virtual learning. A learner's autonomy can be defined as the ability to actively manage one's learning processes, maximize learning opportunities, and take charge of one's learning. Black girls can exercise agency in virtual learning by engaging with the material in a meaningful way. They can ask questions, challenge assumptions, and offer their perspectives to deepen their understanding of the material. The girls in this study enjoyed the individualized pacing that virtual learning gave them (Tsai, 2021). The United States Commission on Civil Rights (2011) found that accurate pacing and appropriate difficulty level resulted in fewer behavior problems which can result from boredom in the classroom. Since Black girls are suspended at higher rates than girls of any other race (Osher et al., 2015), utilizing virtual learning to allow for self-pacing could have a significant impact on Black girls' behavioral and discipline outcomes.

Secondly, the study found that Black girls often find safety behind the screen. There were three ways Black girls found safety behind the screen: emotional shield, physical safety, and agency. Emotional safety was expressed in participants' note of fewer racial and exclusionary experiences while attending school virtually. Participants commented that since teachers can see and hear all communication when in a virtual classroom, classmates "were not as bold" with their negative comments. This is significant because a positive racial and gender identity is often a protective and promotive factor (Elmore & Oyserman, 2012; Rouland, 2017) that has achievement-related outcomes (Sellers et al., 2003; Wong & Rowley, 2001). When Black girls must deal with verbal abuse and discrimination simply for being who they are and existing in their own skin color, it becomes a daily task for them to fight for and embrace a positive identity.

The study also found that Black girls felt physically safer in the virtual learning environment. In today's classroom, students experience many anxiety and fear producing experiences, including bullying, harassment,

and fear of school shootings. While Black girls tend to underreport being bullied (Lai & Kao, 2027), Black students, in general, “appear to have increased rates of bullying and peer victimization” (Fleming, 2022, para. 3); and higher rates of experiencing identity-based bullying are associated with youth who have multiple marginalized identities (Galán et al., 2021). For these participants, virtual learning allowed students to learn in the safety of their homes or other locations that they and their family consider protected. One participant made the following comment:

When you’re on virtual nobody really, like, messes with you. But when you go in person there’s, like, a bunch of people just, like, messing with you and, like, not leaving you alone at that point. But on virtual, you kind of just chill and nobody is being rude or hateful to each other. But like in person people are rude and it’s just kind of weird.

A participant also commented about fear of “something happening” in the traditional school setting:

Virtual school is like, okay, if something happened at school and you were online, you wouldn’t have to worry about it because you’d be at your house safe. But at school, there’s a chance that you could either get hurt and there could be like a lot of injuries...

While Black students make up only about 15% of the total K–12 school population in America, they make up 30% of the average school population affected by a fatal shooting (Everytown, 2022). The combination of fear and anxiety about attacks that come from within the school building and those lurking just outside its doors has a tangible impact on Black girls’ feelings of safety and emotional well-being.

Agency presented as another form of safety behind the screen. Social media has sparked multiple studies on Internet bravery as it relates to individual’s bravado in trolling or cyberbullying others; however, some students are exhibiting Internet bravery in a positive way, feeling safe and confident to voice their disapproval when verbally harassed in their virtual classroom. Although student agency is typically connected to students’ active participation in their education, it can also refer to students’ capacity to take action when their education is being disrupted by various forms of mistreatment (Vaughn, 2020; Wun, 2016). For example, when Black girls attend traditional schools, they may hold their tongue or walk away when confronted with harassment because they know they are more likely to be held accountable or suspended. But when in class virtually, they feel safe

and confident to speak up for themselves and challenge mistreatment. As an example, one participant noted that when a teacher put students in break-out rooms online, a classmate began making “racial slurs” about the participant and her friend. She noted that if she were in the physical school setting, she would have “walk[ed] out of the classroom and go to the counselor’s office because at that point, I would just feel too disrespected to just stay in that room and just let them keep saying that [racists comments]” However, in the safety of her own home, she confronted the classmate and told him that what he was saying was “not right and it’s very racist.” Behind the screen, Black girls’ may be able to reconstruct and repair past school related trauma that has impeded their racial and gender identity development.

IMPLICATIONS

The findings of this study have several important implications for the academic success of Black girls. First, the results indicate that there are opportunities to expand out of school time (OST) opportunities for Black girls who do not participate in enrichment activities due to a lack of access/transportation and other potential barriers related to location and logistics. Specifically, many Black families are location bound, which prevents some Black students from participating in STEM enrichment programs. For instance, the results of a latent class analysis conducted by King et al. (2021) revealed that the *I AM STEM* summer enrichment program’s location increased access to informal STEM learning opportunities for parents who experienced poverty in their Atlanta based STEM program serving a large population of Black youth. Programs like *I AM STEM* and other culturally responsive summer enrichment programs can offer virtual learning to bridge gaps in learning and reduce summer learning loss. Hence, virtual options are an important consideration for increasing Black girl access to programming when location becomes a constraint.

Related to increased access to enrichment, virtual learning environments also provide opportunities for academic remediation and acceleration for Black girls who are struggling or excelling in core content areas such as reading or mathematics. Without virtual learning options that can be completed in an online self-paced environment, many Black girls may avoid accessing remedial support programs due to embarrassment or a lack of school personnel to provide the services. Moreover, virtual learning spaces can also be used as a tool for learning acceleration. Remediation is often the priority of many educational spaces, but the results of this study suggest that virtual learning can serve to accelerate the learning of Black girls. This is particularly beneficial for STEM content areas that tend to be presented in a strict sequence. For instance, in the U.S the most common sequence of

mathematics courses is pre-algebra, Algebra I, geometry, Algebra II, trigonometry or precalculus, and finally, calculus (Irizarry, 2021). Due to strict course offerings and tracking schedules, many Black students lack access to high school calculus if they do not take algebra in the 8th grade because in most high schools, students only have four years/opportunities to take a mathematics course (Edosomwan et al., 2022). However, virtual learning environments would allow for Black girls to overcome this constraint by dual enrollment in multiple mathematics courses.

The third implication of this study is that additional work needs to be done to understand the intersection between technology (access, use, mediums, affinities) and Black girls learning modalities. Although there are many models to support teaching and learning with and through technologies (i.e., TPACK, ADDIE, etc.), there is an absence of evidence to support the specific technology mediated learning needs of students of color and Black girls, specifically. This evidence would help to inform the development of innovations in teaching Black girls with and through technology (i.e., software, enrichment, curriculum). These innovations will help to increase the academic success of Black girls across learning environments and academic spaces.

Finally, the results of this study suggest that virtual learning can help to address the learning loss that takes place due to the over utilization of exclusionary discipline on Black girls. A primary academic outcome of suspension/expulsion is loss of instructional time (Álvarez, 2020). Virtual learning opportunities can provide students with instructional options during their classroom exclusion. While this absolutely does not negate the much-needed work that must persist to stop the over discipline of Black girls, this could be an alternative to support learning while suspended instead of the many nonproductive activities that are often assigned (e.g., writing the entire student handbook). The appeal of virtual learning not only reduces discipline infractions it also provides a learning option for Black girls who are assigned exclusionary discipline by schools.

FINAL THOUGHTS

We would be remiss if we did not note that Black girls' experiences run the gamut; so while many have endured experiences that make them proclaim, "you're out of your mind if you think I'm ever going back to school" (Anderson, 2020), others have endured similar experiences but still desire to return to traditional schooling to be with their friends and "get more help from the teacher." Still others may not report adverse experiences at all—this could be because they have truly been fortunate enough to not encounter acts of racism or sexism, or because the many forms of racial and gen-

der-based oppressions have become so much a part of daily life that such acts are “normal” and not reported.

Ultimately, virtual learning has had a clear impact on the social and emotional growth of our participants and has uniquely impacted their feelings of safety and empowerment. Black girls’ intersectionality of race and gender often puts them in double jeopardy of experiencing both racial and gender discrimination while on the school campus. Such inequity seems to be diminished or even eliminated when experiencing school from the safety of their own homes.

As Black women who either have Black daughters or are mentors to Black girls, and who have taught k-12 through higher education both virtually and in traditional school settings, we (the authors) are intimately familiar with Black girl struggles in various aspects of the educational environment. We know from our own childhood school experiences that Black girls often have a surplus of hindrances and not enough helps in their academic journey; we have lived and continue to live through the two-fold discrimination on the basis of race and gender; and we understand the importance of conducting research that illuminates the voices of Black girls’ experiences at the intersection of various education phenomena. We hope this research encourages other scholars to conduct similar research and prioritize Black girls’ experiences in this changing educational landscape.

DECLARATIONS

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