African American Males and Online Education: A Review of the Literature

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Abstract

Online education is continuing to grow in popularity with students with more and more institutions offering fully online degrees. In addition, online education potentially offers a color free environment where students are less likely to be judged by race and treated more equally as this is one of the benefits of online education. However, African American male students are not as likely to enroll in online classes. This literature review examined factors related to African American male students and the online course environment including general characteristics of online learners, attrition rates among online courses, and gender gaps in both onsite and online courses within higher education. In addition, African American student online enrollment trends, characteristics of African American online learners, achievement gaps in both onsite and online courses within higher education, the influence technology and user skills as well as economics and academic influences that may have contributed to African American male online learners' positive experience were reviewed.

Introduction

Online education enrollment in higher education has continued to grow in recent years (Allen, Seaman, Poulin, & Straut, 2016; Lokken & Mullins, 2014; Williams, 2015). In fact, the demand by students for online courses at community colleges has become greater than the demand for onsite courses (Lokken & Mullins, 2014), and educational institutions are expanding their programs to meet this growing demand (McGivney, 2009). In addition, Figlio, Rush, and Yin (2013) and the International Federation of Library Associations (2016) believe that online courses may become more prominent than onsite courses in the near future. Moreover, some studies have found that students taking online courses were more successful in completing their degree plans (Shea & Bidjerano, 2014; Swan, 2016) and made faster progress toward graduation than their classroom-only counterparts (Swan, 2016).

The primary reason cited for online course popularity among students was convenience (Harrington & Loffredo, 2010; Preisman, 2014; Xu & Jaggars, 2011). Other reasons cited for online course popularity were schedule flexibility (Horspool & Lange, 2012), institutional flexibility (Xu & Jaggars, 2011), time limitations (Hartnett, St. George, & Dron, 2011), enjoyment of computer technology (Harrington & Loffredo, 2010), and access to higher education by students who otherwise were unable to attend college (Cox, 2005; Preisman, 2014; Romero & Usart, 2014). The convenience of online learning was particularly valued by students with multiple responsibilities and highly scheduled lives, helping them return to school to complete their education (Tonsing-Meyer, 2013; Xu & Jaggars, 2011). In fact, non-traditional students such as working adults and parents represent 85% of college enrollment in the United States (Postsecondary National Policy Institute [PNPI], 2017). In addition, convenience was cited as the chief motivating factor for online enrollment among students within historically Black colleges and universities (Kwun, Alijani, Mancuso, & Fulk, 2012) and among African American male college students (Tucker, 2014).

The purpose of this literature review was to examine factors related to African American male students and the online course environment. This literature review considered general characteristics of online learners, attrition rates among online courses, and gender gaps in both onsite and online courses within higher education along with

African American students online enrollment trends, characteristics of African American online learners, achievement gaps in both onsite and online courses within higher education, the influence technology and user skills as well as economics and academic influences that may have contributed to African American male online learners' positive experience.

Characteristics of Online Learners

In general, college students who enrolled and completed online courses were older students (Fetzner, 2013; James, Swan, & Daston., 2016; Newell, 2007; Romero & Usart, 2014). In addition, students who enrolled and completed online courses more likely have had higher enrollment status (Cochran, Campbell, Baker, & Leeds, 2013) or have earned greater numbers of higher education credits prior to enrolling in online courses (Fetzner, 2013) with superior academic performance (Artino, 2008; Lu & Lemonde, 2012) or high achievement orientation (Varela, Cater, & Michel, 2012). These students also had higher self-efficacy scores (Xie & Huang, 2014) including technology self-efficacy (Sinclaire, 2011) and Internet self-efficacy (Chang et al., 2014), were more autonomous and self-regulated (Collins, 2014; Varela et al., 2012; Yukselturk & Bulut, 2007), and had future career aspirations (Carr, 2000; Park & Choi, 2009).

In addition, online students often were already employed (Williams, 2015; Xu & Jaggars, 2014), had higher incomes (Collins, 2014), and were ineligible for financial aid such as Federal Pell Grants (Newell, 2007). Online students generally enjoyed computer technology (Harrington & Loffredo, 2010), had superior computer skills (Carr, 2000; Horzum, Kaymak, & Gungoren, 2015; Menchaca & Bekele, 2008; Sahin & Shelley, 2008), and were racially White (Flowers, White, Raynor, & Bhattacharya, 2012; Newell, 2007; Shea & Bidjerano, 2014). Studies that investigated perspectives and personality traits of online learners found that they tend to have low gregariousness scores, meaning that they were more introverted (Varela et al., 2012), and had significantly higher past negativism scores, meaning that they previously experienced disappointing or unsatisfactory relationships in the context of education (Romero & Usart, 2014).

Online Education Attrition

Russell (2001) found no significant difference in student learning outcomes when comparing face-to-face education and distance learning education. However, the majority of studies used to formulate this concept were based on the achievement scores of well-prepared college students (Xu & Jaggars, 2011). Early on, Clark (1983) published results of a meta-analysis examining the role of media, such as television and computers, in education in which he concluded that type of media did not affect learning. Media, Clark argued, were merely vehicles of delivery and did not influence achievement any more than the truck delivering groceries causes changes in food nutrition. He suggested any slight learning advance in favor of the newer media over the more conventional instructional vehicles was largely due to novelty, and dissipated over time (Clark, 1983). Clark also put forth that problems with learning and achievement can be influenced by media attributes such as cost, distribution, and equity of access. Furthermore, while Friedman (2007) declared that the world is flat, making the world of higher education more accessible to a wider range of students, this statement does not take into account individual characteristics of online learners, including race, gender, socioeconomic status, academic abilities, computer/Internet access, and technology skill level (Collins, 2014; Parrish & Linder-VanBerschot, 2010).

Dropout rates are generally higher in online courses (Romero & Usart, 2014) compared with traditional onsite or campus-based courses (Bambara, Harbour, Davies, & Athey, 2009; Xu & Jaggars, 2014). Several studies have found poorer outcomes in online courses across different groups of students (Hart, Friedmann, & Hill, 2015; Xu & Jaggars, 2014). These findings suggest that some students may not be suited for online learning. For example, students at higher risk for poorer online learning outcomes are younger students (Xu & Jaggars, 2014); low-income students (Jaggars & Bailey, 2010); academically underprepared students (Cater, Michel, & Varela, 2012; Figlio et al., 2013; Jaggars & Bailey, 2010), including students with lower prior GPAs (Cochran et al., 2013; Figlio et al., 2013; Xu & Jaggars, 2014); male students (Figlio et al., 2013; Xu & Jaggars, 2014); African American students (Xu & Jaggars, 2014); students who had previously withdrawn from online courses (Cochran et al., 2013); and students who had freshman status or less academic experience (Cochran et al., 2013). In addition, dropout rates were often higher during summer sessions (Hart, Friedmann, & Hill, 2015).

However, Park and Choi (2009) did not find that age, gender, or educational level played a significant role in the decision to drop online courses but instead found lack of organizational support and lack of course relevance to the learner's goals and aspirations to be particularly predictive of online course attrition. Furthermore, students who enrolled in online courses in early terms or early in their college careers were less likely to return to school in subsequent terms (Xu & Jaggars, 2014). Students who took a higher proportion of college credits online were less likely to attain educational credit or transfer to a four-year institution (Xu & Jaggars, 2014). Approximately 30%

of unsuccessful online learners indicated they were unlikely to re-enroll in future online courses (Fetzner, 2013).

When learning online, students acknowledged technologic issues (Liu, Gomez, Khan, & Yen, 2007; Tonsing-Meyer, 2013) and lack of technical support (Palmer & Holt, 2010; Yang & Cornelius, 2014). Students learning online also experienced feelings of isolation (Reilly, Gallagher-Lepak, & Killion, 2012; Tucker, 2014; Yang & Cornelius, 2004), ineffective communication methods (Osborne, Kriese, Tobey, & Johnson, 2009; Tonsing-Meyer, 2013; Yang & Cornelius, 2004), privacy concerns (Reilly et al., 2012), inadequate teacher support (Palmer & Holt, 2010), and lack of instructor presence (Okech, Barner, Segoshi, & Carney, 2014; Sitzman & Leners, 2006; Tonsing-Meyer, 2013). In addition, several studies indicated that students found online learning largely undifferentiated and incorporated monotonous instructional methods (Sammel, Weir, & Klopper, 2014; Speece, 2012; Yang & Cornelius, 2004).

Gender Gaps in Higher Education and Online Education

A gender gap exists in higher education, with more females than males enrolling in college (James et al., 2016) and earning college degrees (Buchmann & DiPrete, 2006). A gender gap also exists among African Americans, favoring females who are earning higher grades (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006) and finishing school (Buchmann & DiPrete, 2006). The African American gender gap, first identified in 1974, represents a continuation rather than a reversal of previous trends (Buchmann & DiPrete, 2006). In addition, Harper and Porter (2012) and Scott, Taylor, and Palmer (2013) found African American male student enrollment at institutions of higher learning is approximately 4.5%, which is the same enrollment percentage it was in 1976.

Gender gaps were also discovered in studies on online education, with females outperforming males (Johnson, 2011; Kupczynski, Brown, Holland, & Uriegas, 2014; Xu & Jaggars, 2014). Female students were more satisfied with online learning (González-Gómez, Guardiola, Rodríguez, & Alonso, 2012; Johnson, 2011), claimed to learn more in online courses (Lim & Kim, 2003), found online learning more valuable (Johnson, 2011), and perceived better overall instructional quality over male students (Lim & Kim, 2003). In addition, female online learners were connected knowers, meaning that they tend to emphasize understanding, compassion, acceptance, and cooperation during the online learning process (Palmer, Bowman, & Harroff, 2013), resulting in more communication (Johnson, 2011), more collaboration (Palmer et al., 2013; Venkatesh, Croteau, & Rabah, 2014), and greater perceived social presence in online learning environments (Johnson, 2011). Communication styles used by female online learners were perceived as friendly and polite; they regarded other online learners as friends (Thayalana, Shanthia, & Paridi, 2012). The most engaged online learner was the single female (Palmer et al., 2013). However, Newell (2007) found that gender did not play a role in online course completion. Only one study that examined gender differences among African American students noted female online learners outpaced male online learners (Tucker, 2014).

In contrast, Palmer et al. (2013) observed male online learners were more independent during the online learning process; however, Venkatesh et al. (2014) noted they preferred learning unaccompanied without socializing. When communicating online, males often stated their views seemingly unaware of other members of the online learning community (Thayalana et al., 2012). In addition, Palmer et al. (2013) suggested male online learners were more assertive and less collaborative and Thayalana et al. (2012) noticed more males than females used language that was perceived as crude or harsh.

Technologic Influences on Online Course Persistence

According to Newell (2007), access to technology and considerable computer literacy and skills are requisites for online course success. However, not all college students are digital natives, having varying degrees of comfort with technology and computer skill (Osborne et al., 2009). Disparities in technology access, also called the *digital divide* or *technology gap*, is defined as unequal Internet and technology access and unequal technology skill levels among populations (Collins, 2014; Moore, 2014; Okwumabua, Walker, Hu, & Watson, 2011).

A technology gap exists in higher education (Boyette, 2008), and these disparities may be partially responsible for the achievement gap seen in online education (Fairlie, 2012a) from unequal access to technologic devices and Internet, which may lead to reduced participation (Rovai, 2007; Sadykova & Dautermann, 2009; Zhao, Lu, Huang, & Wang, 2010). Computer skills are important for educational success and for job success after college graduation, as 95% of jobs held by college-educated workers require the use of computers (Fairlie, 2012b). In addition, online job searches, which require computer access and computer literacy, are the primary method used by job-seeking college graduates (Fairlie, 2012b).

Online education requires the learner to have access to technologic equipment such as hardware and digital

accessories, productivity software, and reliable Internet access. However, limited access to current technologies may have contributed to African American students (Collins, 2014), and more poignantly, African American male students (McCoy, 2012), to experience poorer educational outcomes. Zhao et al. (2010) reported home computer usage had more impact on digital inequality than school computer usage. In a field experiment to determine if achievement gaps were partially due to disparities in technology access, minority students who were eligible for financial aid achieved better educational outcomes after receiving free computers, 17-inch monitors, and productivity software over the control group who did not receive the free hardware and software (Fairlie, 2012a). The digital divide is also evident in Internet usage as African Americans, households with lower incomes, and people who lack a high school education are less likely to be online (Zickuhr & Smith, 2012), and students living in rural areas have less Internet access than students living in urban areas (Zhao et al., 2010).

Research from the Pew Internet and American Life Project has indicated that African Americans, more than any other population, use smartphones as their main source of Internet access (Zickuhr & Smith, 2012). While this report did not include details of smartphones themselves, screen size of technologic devices was found to impact learning outcomes when users interacted with these devices to perform information-seeking tasks (Ghamdi et al., 2016; Maniar, Bennett, Hand, & Allan, 2008; Raptis, Tselios, Kjeldskov, & Skov, 2013). In addition, Raptis et al. (2013) found that mobile device users experienced significant information gains while reading if the size of the screen was 4.3 inches or larger. Maniar et al. (2008) noted that video-based learning was less effective when students used mobile devices with screen sizes ranging from 1.65 inches to 2.75 inches. Furthermore, participants who read information using devices with smaller screens took longer to read (Ghamdi et al., 2016; Raptis et al., 2013), experienced reduced reading clarity (Ghamdi et al., 2016), and were less able to recall information they read compared with participants who read information on devices with larger screens (Ghamdi et al., 2016; Raptis et al., 2013).

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2013), experienced reduced reading clarity (Ghamdi et al., 2016), and were less able to recall information they read compared with participants who read information on devices with larger screens (Ghamdi et al., 2016; Raptis et al., 2013).

Influences of technical difficulties and technology support. Many online students experienced frustration related to problems with technology (Okech et al., 2014; Reisetter & Boris, 2004; Tonsing-Meyer, 2013), as well as difficulty locating and posting online assignments within the learning management system (Palmer & Holt, 2010). Students had a strong preference for technology that was easy to use (Sammel et al., 2014) and often resorted to familiar yet nonacademic online resources rather than university online resources (Armstrong, 2011). In fact, Menchaca and Bekele (2008) believe that prior knowledge regarding where to find online tools and how to use them helped students succeed in online courses. In some cases, problems with technology interfered with online course progress (Bambara et al., 2009) and led some students to withdraw from their online courses (Bambara et al., 2009; Liu et al., 2007). In addition, online students felt that they did not receive sufficient technical support (Palmer & Holt, 2010; Yang & Cornelius, 2004) and that technical problems should have been addressed and resolved more quickly (Sitzman & Leners, 2006). Consequently, African American male students who encountered technology issues had poorer online learning experiences (McCoy, 2012), and those who dropped out from online courses indicated their decisions were largely due to inadequate discomfort with technology and computer skills; insufficient levels of technology support; and online course difficulty, including problems accessing online course materials and tools (Moore, 2014).

Influences of technology experience, skills, and self-efficacy. Online students with high Internet self-efficacy outperformed online students with low Internet self-efficacy (Chang et al., 2014), and self-efficacious online learners were more focused and engaged (Sahin & Shelley, 2008), more satisfied with the online learning experience (Sinclaire, 2011), and achieved better learning outcomes (Menchaca & Bekele, 2008; Sahin & Shelley, 2008). Students who used Internet technology in their personal and professional lives or had previous successes in online courses were more comfortable (Sahin & Shelley, 2008), more persistent (McGivney, 2009), and more successful learning online (Menchaca & Bekele, 2008). Lack of competence and confidence with online learning software was one of the reasons cited for attrition in graduate-level online degree programs (Willging & Johnson, 2004). Male online learners had higher Internet self-efficacy than female online learners (Chang et al., 2014; Ong & Lai, 2006), but male online learners participated less in online discussions and had lower grades compared with their female learner counterparts (Chang et al., 2014).

Online Education: African American Students
The U.S. Department of Education (National Center for Education Statistics, 2011) reported that African Americans are more likely than any other demographic group to take their entire undergraduate program online (Moore, 2014). Ironically, Flowers et al. (2012) found historically Black colleges and universities (HBCUs) have been slow to create online programs for their students, with only 18% of 105 HBCUs offering online degrees. Not surprisingly, 64% of students attending HBCUs prefer face-to-face courses over online or hybrid courses (Kwun et al., 2012). In addition, Flowers et al. (2012) and Shea and Bidjerano (2014) found in other colleges and universities, African American students were significantly less likely to enroll in online courses compared with White students. However, African American students and students attending HBCUs who enrolled in online courses did so for the same reason as other students who did not attend HBCUs—convenience (Kwun et al., 2012; Moore, 2014).

African American online students tended to have lower grades (Rovai & Ponton, 2005; Xu & Jaggars, 2014), lower perceived learning gains (Flowers, Flowers, Flowers, & Moore, 2014; Rovai & Ponton, 2005), fewer posting behaviors (Rovai & Ponton, 2005), less sense of a learning community (Rovai & Ponton, 2005), and lower satisfaction scores (Ke & Kwak, 2013). Cochran et al. (2013) discovered African American students were more likely than other ethnic groups to have a cumulative GPA below 3.0, which may have led to lower scores in online courses. Ashong and Commander (2012) found that both African American and White students had positive views of online learning, but African American students reported significantly less positive views regarding the asynchronous online feature.

It appears that many African American students have a much stronger preference for real-time learning (Ashong & Commander, 2012) and face-to-face interactions (Merrills, 2010; Rovai & Gallien, 2005) characteristic of traditional campus-based courses. However, African American students reported fewer microaggressions in the online classroom (Hall, 2010), which indicates that online delivery may create a culturally neutral environment for these students (Stanley, 2014), allowing some students to distance themselves from negative stereotypes (Collins, 2014), especially students with past negative experiences in educational settings (Romero & Usart, 2014). Specifically, this literature examined African American online learners' characteristics, achievement gaps, and factors for success. In addition, economic, academic, and technologic influences that may influence online course

attrition and online course persistence and subsequent completion among African American males are reviewed.

Characteristics of African American online learners. In general, African American students who enrolled in online courses were older (Collins, 2014; Williams, 2015), female (Williams, 2015), full-time students (Williams, 2015), who either worked full-time or were unemployed (Williams, 2015). African American online learners had higher incomes (Collins, 2014), were independent (Collins, 2014) and unmarried with dependents (Williams, 2015), had a strong sense of positive racial identity (Collins, 2014), and had a high degree of cultural awareness (Rovai & Gallien, 2005). Williams (2015) found that a majority of online-only African American students attended private for-profit institutions.

African American males: Achievement gaps in onsite and online classes. An achievement gap exists in higher education, with African American male students having the poorest educational outcomes compared with students in other demographic groups (Palmer, Davis, Moore, & Hilton, 2010). Between 1995 and 2015, African American students aged 25-29 who held a bachelor's degree or higher increased from 15% to 21%, whereas White students in the same age range who held a bachelor's degree or higher increased from 29% to 43% (National Center for Education Statistics, 2016). While these figures represent young African American students and White students obtaining higher education degrees within this time period, achievement gaps between African American students and White students actually increased rather than decreased, widening from a 14% difference in 1995 to a 22% difference in 2015 (Moore, 2014; National Center for Education Statistics, 2016). Other sources have confirmed gaps between African American students and White students regarding degree completion (Moore, 2014), the length of time required to complete a degree (Greene, Marti, & McCleeney, 2008), and lower education outcomes while in school (Greene et al., 2008; Stanley, 2014).

Achievement gaps between African American students and White students in onsite courses also exist in online courses (Rovai & Gallien, 2005; Rovai & Ponton, 2005; Xu & Jaggars, 2014), and gaps are often greater in online courses (Xu & Jaggars, 2014). Arroyo (2010) pointed to this issue by stating that, "Contrary to those who tout online education as the great leveler in higher education with the promise of granting access to one and all, what we actually have is the recipe for a widened achievement gap" (p. 38). Possible reasons why gaps between African American online students and White online students exist include differences in socio-economic status (Palmer et al., 2013), gaps in academic performance (Osborne, 2001), disparities in technology access (Fairlie, 2012a), lack of online technical support (Rovai & Gallien, 2005), and anxiety related to negative racial stereotyping (Osborne, 2001).

Factors contributing to onsite academic success for African American males. Factors that helped African American college students achieve academic success learning in onsite or campus-based classes were positive pre-college educational experiences (Fletcher, 2015), supportive college campus environments (Fletcher, 2015; Hague-Palmer, 2013), involvement in campus activities (Fletcher, 2015; Gilkey, 2012), positive faculty interactions and faculty support (Bush & Bush, 2010; Fletcher, 2015; Hague-Palmer, 2013; Robertson & Mason, 2008), same race/same gender relationships with peers and with mentors (Brooks, Jones, & Burt, 2013; Fletcher, 2015; Gibson, 2014; Gilkey, 2012), family support (Fletcher, 2015; Gilkey, 2012), self-determination (Fletcher, 2015; Gilkey, 2012) or grit (Strayhorn, 2014), future career aspirations (Fletcher, 2015), and the ability to handle racism (Robertson & Mason, 2008). African American males reported experiencing psychological stress characteristic of battle fatigue from microaggressions, stereotyping, and marginality (Smith, Allen, & Danley, 2007). In addition, if African American male students felt they were perceived by White faculty as underprepared and intellectually inferior, this perception served as a barrier to achieving academic success (Suarez-Balcazar, Orellana-Damacela, Portillo, Rowan, & Andrews-Guillen, 2003).

African American male online learners as college students. Tucker (2014) identified conditions within and beyond online environments that supported academic success among male college students of color, which included African American male students. Factors *within* the online learning environments that supported academic success were convenience and flexibility, a color-blind environment, faculty support and immediate interactions, and institutional support. Factors *beyond* the online learning environments that supported academic success were student characteristics of academic self-efficacy and educational resilience. In addition, students of color preferred traditional offline social supports from close social ties, which may serve to reduce the feelings of isolation and alienation commonly experienced by these students when learning online (Tucker, 2014).

Economic influences on online course persistence. Economic factors may influence academic underachievement among African American male college students (McDaniel, DiPrete, Buchmann, & Shwed, 2011; Tucker, 2014). According to the National Center for Educational Statistics (2015), 50% of African American male students are raised by their mothers in single-parent households. Families headed by single parents, particularly single mothers, are associated with higher incidences of poverty (United States Census Bureau, 2015). Consequently, lower

incomes are associated with poorer educational outcomes (Child Trends Databank, 2015). Financial struggles were experienced by first-year African American male college students (Fletcher, 2015). Robertson and Mason (2008) found that inadequate financial aid undermined African American male college students, and financial assistance helped them succeed academically. Tucker (2014) observed African American males had a difficult time navigating websites that were used to apply for financial assistance, and McDaniel et al. (2011) indicated that a lack of finances was a possible reason why African American male students take longer to complete college once enrolled.

Economic factors were identified as contributing to lack of online course access (McCoy, 2012) and online course attrition (Liu et al., 2007) and may also interfere with online course completion by African American males (Jaggars & Bailey, 2010; Zickuhr & Smith, 2012). Jaggars and Bailey (2010) determined that previous meta-analysis of online learning outcomes could not be generalized to underserved populations, particularly low-income students, and, without additional supports, online learning may undercut academic progression among these students. Study results released by the Pew Internet and American Life Project stated that households with lower incomes and African Americans were more likely to use their smartphones as the primary source of Internet access (Zickuhr & Smith, 2012), and these devices may be incompatible with learning management systems used to deliver online courses and limit access to online course materials (University of Phoenix, 2017). In addition, low-income households have fewer home computers and less access to the Internet (Zickuhr & Smith, 2012).

Academic influences on online course persistence. Teachers and school counselors disproportionately place African American male students into low–academic-ability classrooms (Palmer et al., 2010). Not surprisingly, African American male students reported feeling underprepared for their college coursework (Hughes, 2010), with 46% of African American college students enrolled in remedial courses (Institute for Higher Educational Policy, 2010). Moreover, African American male students reported struggling in classrooms from inferior academic skills (Hughes, 2010), and this may be why African American male students take longer to graduate from college (McDaniel et al., 2011). In addition, racial-related anxiety may partially explain differences in academic performance between African American students and White students (Osborne, 2001). However, when support systems were in place, African American male students achieved academic success (Robertson & Mason, 2008).

Jaggars and Bailey (2010) suggested online learning may slow progression among academically underprepared students and urged that support should be provided for these learners. Not surprisingly, students lacking academic readiness, students with low GPAs (Cater et al., 2012; Cochran et al., 2013), and students with less college experience (Cochran et al., 2013) were more likely to lose interest, underperform, or withdraw from their online courses (Duncan et al., 2013; Xu & Jaggars, 2014). African American students are much more likely than other racial groups to have a cumulative GPA below 3.0 (Cochran et al., 2013).

Reading and writing skills. African American male students have the lowest average reading scores in 12th grade (Moore, 2014; National Center for Education Statistics, 2015), with many graduating from high school with a literacy level between 3rd and 4th grades (Palmer & Maramba, 2011). In a report published by Public Broadcasting Service, Thompson (2014) noted reading scores of African American 12th grade male students were significantly lower than those for males and females across every other racial and ethnic group. Only 33% of high school graduates from low-income households and 21% of African American high school graduates have college-level reading skills (Kuh et al., 2006). According to data from 1992 to present, reading gaps between African Americans and Whites have increased (National Center for Education Statistics, 2016).

Currently, the primary method used to deliver online instruction is reading (Duncan et al., 2013; Limniou & Smith, 2010; Tonsing-Meyer, 2013), and most assignments involve writing (Tonsing-Meyer, 2013). Minnesota State University, Mankato stressed the importance of strong reading and writing skills as core competencies for academic learning success for students enrolled in their online courses (Minnesota State University, Mankato, 2011). However, online students indicated that reading and writing were the least preferred instructional practice (Tonsing-Meyer, 2013). Tonsing-Meyer (2013) determined that the read/write instructional practice was overwhelmingly emphasized and found in 85% of online course assignments, with most activities involving the use of reading, writing, and posting reflection papers; reading chapters from textbooks; and submitting written research papers. The instructional practice of web- or phone-conferences were rarely implemented.

Some students experienced performance anxiety because of heavy emphasis on writing and felt instructors and peers may judge them for their lack of writing skills and grammatical errors within written posts (Reilly et al., 2012). These perceptions led some learners to focus more on writing skills rather than learning lesson content (Reilly et al., 2012). In fact, Scott et al. (2013) urged educators to help African American males acquire basic

foundational academic skills such as reading and writing so they can succeed in college, which may include remediation for students who possess insufficient writing skills (Sadykova & Dautermann, 2009).

Discussion and Conclusions

The purpose of this literature review was to examine factors related to African American male students and the online course environment. This review shows the literature is somewhat discouraging for African American males successfully completing online degree programs. While studies have noted that they are not as likely to succeed in online classes, the literature reveals there are many influences involved. For example, a lack of adequate Internet access may contribute as the digital divided is still in existence as Pew Research showed only 65% of African Americans in 2016 had broadband Internet access at home (Rainie, 2017). As Sahin and Shelly (2008) pointed out, students who use Internet technology outside the classroom were more comfortable and more successful; if students do not have Internet access, they will be less likely to succeed (Collins, 2014; McCoy, 2012). In addition, Moore (2014) observed some African American students withdrew from online courses and indicated their decisions were partly due to inadequate technology and computer skills; insufficient levels of technical support; and perceived course difficulty, including problems accessing online course materials and online tools.

However, the literature also shows that online education is continuing to grow in popularity with students and more and more institutions are offering fully online degrees. In addition, online education potentially offers a color free environment where students are less likely to be judged by race and treated more equally as this is one of the benefits of online education. The literature also points out students should be self-directed, not averse to reading and writing, and have access to technology and the Internet. Therefore, institutions should continue to develop innovative and supportive resources such as technology tutorials and increased technology support, orientations for the online classroom and study skills, ways for students to purchase needed technology at reduced costs, and ways to encourage online students to persist. The literature shows these resources are needed to support African American male students; however, all online students could benefit and isn't that our goal is for all of our students to be successful?

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