

Race and Gender in Play Practices: Young African American Males

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ABSTRACT

In this paper we present a study with young African American men, to gain a better understanding of the impacts of cultural and gender identity on play practices and to explore the relationship between cultural play practices and interest in computing. Our findings indicate that while young African American men play video games frequently, their objectives in playing may be unlike those who enter computer scientist fields. From this we discuss implications of this study on designing CS learning interventions that leverage video games to introduce young people to computation.

Categories and Subject Descriptors

K.3.2 [Computers and Education]: Computer and Information Science Education - *computer science education*.

K.8.0 [Personal Computing]: General – games.

General Terms

Design, Experimentation, Human Factors

Keywords

Agency, African American, Gender, Video Games

1. INTRODUCTION

With respect to using games for learning goals, Kurt Squire suggests that cultural and player practices should be an emphasis of study [43]. However, as Gaily [14], Ito and Bittani [21], and Leonard [34] have noted there has been little exploration of race in game studies, and even less that explores the intersection of race and gender with gaming. While several studies have looked at this intersection from the perspective of game content and character representation [6,49], little is known about player practices, as Squire suggests.

In this paper we present a study with young African American men, to gain a better understanding of the impacts of cultural and gender identity on play practices and to explore the relationship

between cultural play practices and interest in computing. We discuss implications of this study on designing CS learning interventions that leverage video games to introduce young people to computation.

This study was part of exploratory work in developing a learning intervention that leveraged young African American men's passion for video games into an interest in computing. The resulting learning intervention, the Glitch Game Testers project, is discussed in detail in other literature [8].

2. Background

Video games provide a unique opportunity for researchers to make connections between different groups, such as African American males' interaction with technology. First, the practice of playing video games is ubiquitous among all young people in America today, but particularly passionate about games are young African American men and young men who choose computer science careers. Second, video games are powerful pieces of computation that often inspire wonder and are self-reported as being a major influence on computer scientist interest in computing. Finally, there are differences in play practices among different groups that can help us understand how young people situate technology in their lives, which will help us design better, more culturally appropriate interventions.

2.1 Who is Playing?

Although we have an informal idea of who is playing games, survey data suggest the answer to the question is more complex. The Entertainment Software Association has reported annually on the changing demographics of gamers. Their message stresses that games are no longer (if the ever were) played only by adolescent Caucasian and Asian men. These reports and others provide data that video games are being played by over 90% of children and are consumed by Americans across all classes, cultures, genders, and ages [12,41].

There is a fundamental message across all of the analyses: at least casual use and contact with video games is prevalent across specific demographics regarding race, class, and gender. With 97% of young people in America reporting some use of video games [41], we can now say playing video games are part of growing up in America for everyone. But some groups are using games more frequently. Reports indicate that young African American and Hispanic men play games more hours per day than any other demographic [29,41].

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2.2 Computer Science and Gaming

The possible relationship between playing computer games and an interest in CS has been of particular interest to researchers considering gender inequities in CS [2,5,27]. Research by the American Association of University Women suggested that young men's more frequent video game play had led more men into technology careers than women, and suggested that we get girls gaming to help increase the number of women in technology fields [1]. This recommendation led, directly and indirectly, to a number of outreach and research projects to focus on developing girls' interest in gaming and making games [13,17,24,48].

Research based on computer scientists' biographical stories and ethnographic research with CS majors and young enthusiasts demonstrates that many attribute some of their initial interest in computing to playing video games [4,36,42]. This suggests that video games are an important cultural artifact in the development of computer scientist. However, while in these studies computer scientists often self-reported that video games led to their interest in computing, a survey conducted with over 1,000 students at a technical university indicates that there is only a small relationship between the *hours spent playing* video games and interest in computing [9]. In the same survey, students answered an open-ended question, "How did video games affect your interest in computing?" In response, 45% of the students said that video games increased their interest in computing. Those computer science majors who reported that games affected their interest in computing had specific play practices around gaming, rather than more hours gaming. These play practices correspond with biographical stories and ethnographic research with computer scientists about their video game play practices impacting an interest in computing.

The survey identified several gaming practices and attitudes that were more likely to be found among CS majors, including a desire to make games, understand the mathematics of gaming, or hacking and modifying games. These play practices can be correlated with the stereotype of an obsessive gamer as a Caucasian or Asian male who create, modify and hack video games. Perhaps one reason for this stereotype is that these groups were first-adaptors of games and game culture. This stereotype may also be influenced by Caucasian and Asian males' dominance in the production of games.

To better understand who is making games, we reviewed the 3,349 responses to survey data published in 2005 by the Independent Game Developers Association (IDGA) on game developers' demographics [15,20]. We found that the data reflected some aspects of the make up of society, but contrasted with others. The data indicates the American game industry is 79.4% white, which is in line with 80% of the American population being white [47]. However, it also indicates that 3.64% of the game developers are African American, compared with an estimated 12.8% of the American population that is African American [47]. And one group, Asian ethnicities, are over-represented in the game development industry (8%) compared to their representation in the United States as a whole (4%) [47]. The gender distribution was 86.6% male and only 13.4% female. Demographically speaking, the game development industry better represents who we think is gaming the most (Caucasian and Asian American males), rather than who is actually gaming the most (African and Latino American males).

2.3 Differences in Play Practices

Ito and Bittani [21] express concerns about the lack of scholarship regarding *video game play practices* in relationship to race, ethnicity, and socio-economic status. Research that does explore differences in play practices is often situated in contrasting gender differences. Research that does look at race at the race, ethnicity and cultural representation of game characters and the online development of "black" or minority characters does not explicitly address play practices.

The lack of gender diversity in the game industry and technology fields has led to a number of studies to understand how females play, but there has been little focus on masculinity [32]. Part of this is due to an assumption that studies of gaming practices and game content are normally conducted through a masculine lens. Within these studies, masculinity is an implied homogeneous perspective rather than explicitly identified as a cultural factor, with unique behaviors and values in different cultures.

Research on gender and gaming has shown us that cultural factors impact the genre of games played and the way that games are played [5,25]. This work on gender and gaming has almost exclusively addressed the female or feminine qualities as the "other" in game studies. The findings are complex and sometimes contradictory, but much of the early work addressed the negative and objectified female images in games through content analysis [6,50]. Other work has looked at different practices of game play comparing preferences for game play along gender lines [16,26]. There has also been research on encouraging females to contribute to making and playing games [17,24], to increase their interest in games, study their gaming preferences, and to create a desire among girls to pursue interests in computing and technology.

With such market saturation among all young people, we would expect to see diversity in the games that are produced. Some attempts to quantify the diversity of games have focused upon the number and type of minority and female characters in games. At least two studies have given a comprehensive and slightly different take on the racial demographics in game. In 2001, Children Now, a community-based organization, provided demographics on characters in video games that suggest there is an under-representation of black characters. Those that are in games are generally sports figures or characters that promote negative stereotypes of African American males as aggressive and violent [6,32].

The second study, a recent "census" of gaming characters, is a content analysis of the characters' impact on the general experience in playing video games, weighted by the popularity of games and the status of a character as human- or computer-controlled [49]. In this analysis, black characters represented 10.7% of all characters in the game, and most of these characters are male. In relation to the population of 12.8% African Americans estimated by the 2000 US Census [47], this number would suggest that black males are over-represented in games. However, because the survey heavily weighted sports games such as *Madden NFL* and *NBA*, which are among the biggest sellers in the game industry, most of the African American characters are sports figures that are representations of real people. These popular sports games have a large percentage of African American characters because they base the characters on real life players; for example, in 2006, 67% of National Football League players were African American [30].

From this survey, we can identify that while there are black male game characters, they are most often sports figures that are already known to the players. What does this mean for young African American men playing games? Because some of the most popular games with young black men are sports games [32], we can speculate that they are often playing black characters. With African American's low representation in the game industry, it not surprising that the most appealing video games are directly correlated to real people and existing games that happen to have crossover between cultures. Sports games such as golf were not as popular with the young African American men we interviewed because they did not have a preexisting interest in golf.

It may be that the games that young black men are playing are simply virtual representations of what is already happening in the real world. They may see the football player, not the game maker, as the person to emulate.

For many games, particularly online games, the issues of a characters' race would seem to be eliminated with player-created characters. But work by Kafai, Cook and Fields [23] outlines how the lack of premade avatar parts in online communities limits the number of options for players of color. Higgin [18] examines the lack of "black" or minority characters in online games and the privileged whiteness as the default settings in character creation. Leonard has further explored the studies of characters and the lack of discourse on race and the larger implications of ignoring "black and brown" characters in games [33]. Nakamura [38] has examined racist practices in gaming associated with gold farmers in *World of Warcraft*. While all of this research is informative of race and ethnicity through critical reviews of games content and characters, it does not specifically address the play practices that may be based upon race and ethnicity.

2.4 Previous Study

In an exploratory study in 2006, researchers conducted group interviews and observations at a summer youth program that served middle school children in an economically disadvantaged neighborhood in Pittsburgh, Pennsylvania [10]. The participants were African American males between the ages of 11 and 14.

In these observations and interviews, DiSalvo et al. found that the young African American men's play practices differed from observations of young Caucasian men. These differences centered around five primary findings. The subjects tended to:

- Begin playing video games younger.
- Play more often with parents or adult family members.
- Play competitively with others in-room (rather than online).
- Consider games similar to / extension of competitive sports.
- Use fewer modifications, hacks, Easter eggs and cheats¹.

The study suggested further research with individual interview, directed to play practices.

3. METHODS

In order to extend this study and gain a better understanding of African American male video game play practices, we deployed a survey and conducted observations with 17 participants. We were able to conduct follow up interviews with 13 of them about their gaming practices. These students were all African American males, living in Atlanta, Georgia, and in an older age range, 15–

17. They were attending schools that had a 99% African American student body and over 70% of students received free or reduced lunches.

The students were participants in an after-school program about jobs in game testing. A high school teacher and after-school program coordinators recruited the students, who self-selected into the program. We first gave the students a survey to gather demographic information and general information about their gaming habits. We conducted observations while students played one of two games: *Madden NFL* on a PlayStation 2 console during one afternoon session, or *Fusion Fall*² on a personal computer during six afternoon sessions.

Interviews were conducted with 13 of the participants after the after-school program concluded. These interviews were held in environments in which students would feel comfortable, including after-school clubs, the local library, and fast food restaurants near their high schools. Interviews were open-ended questions about gaming, computer use and after-school programs in which the students participated. The interview lengths ranged from 24 minutes to 52 minutes, with the average time being 40 minutes.

In analyzing the interview data, we first coded for specific references to 19 items. We developed this coding scheme to help organize the analysis. First, we identified codes from themes found in previous studies; for example, we had identified cheating and sports as themes that had provided information about students' interaction with games in previous studies. Second, we created codes for items that specifically addressed educational goals, such as technology and problem solving. Finally, we included other items in the coding when they repeatedly occurred in the transcripts, for example, the use of terms to describe creativity or anger. The 19 items we coded to organize the interview transcripts were:

- | | | |
|---------------|----------------------------|---------------------------------|
| • Anger | • Friends | • Single player |
| • Creativity | • Level | • Skillful gaming |
| • Competition | up/unlocking | • Social |
| • Confidence | • Maturity | • Sports |
| • Escaping | • Modding/
from reality | • Talk |
| • Experience | • Online | • Technology/problem
solving |
| • Family | • Other priorities | |

To further organize the transcripts, we took each text associated with each of the 19 items and analyzed it through the perspective of three themes. The first theme examined how students expressed their feelings about video games in their life and as a reflection of themselves. The second theme considered how the students expressed their experience with technology, computation and gaming. The third theme explored how students expressed their social experience with game.

4. FINDINGS

4.1 Survey

Seventeen students completed surveys. In the survey, students provided information about their current interests, future goals and gaming habits. This survey was an opportunity for us to

¹ In the context of this paper these activities are referred to as modding and cheating see Consalvo [7], for a review of game cheating.

² *Fusion Fall* is a massive multiplayer game for children, produced by Cartoon Network. We were given free access to the prerelease version of the game for students to play by Cartoon Network.

gather baseline information on the interests and goals of the students, and to situate the richer interview data. Our major findings centered around education and video game use.

4.1.1 Education & School Life

We found the students were in some agreement about their favorite school subject, with ten reporting math as their favorite subject, and three listing Language Arts. The remaining four students reported Art, Social Studies, Personal Fitness and no favorite subject. There was less agreement on the least favorite subject, although Math appears to be polarized with five students reporting that Math was their least favorite subject. Language Arts (4), Science (3), Art (2), and Social Studies (1) were all also reported as least favorite subjects and two students reported that they did not have a least favorite subject. All of the students intended to seek additional education after high school, college or trade school. When asked, “What will you be doing at the age of 30?” eight students reported they intended to be professional athletes, three intended to be working with technology, three planned on working as artist or musicians, and two intended to be entrepreneurs.

4.1.2 Video Games

Participants in general favored sports games and shooters. Nine students reported sports games, *Madden NFL* or *NBA*, being their favorite game. Four students reported their favorite game was a shooter or war game, such as *Gears of War*, *Assassin’s Creed*, and *Gun*. Three students listed anime-style fighting games, *Dragonball* and *Soul Calibur*, and one student reported *Burnout*, a racing game. Students reported playing an average of seven hours per week, with all students playing at least one hour per week. All students reported that they preferred playing with friends and 13 students reported that socializing while they played video games was “important” or “very important”. Eleven students reported that they play online. Of the 17 students who participated in the written survey, six students reported that they used cheats when playing games.

4.2 Observations

Console game play preferences seemed to align with the designed intentions of use. We noted that students often played together, competing on the console games. There were open console game systems, but the students preferred to play *Madden NFL* against each other at the same console. More surprising was their choice to often watch each other play *Fusion Fall*, rather than playing with each other from different desktops. Because the game is an online multiplayer game, students had the option to play from their own desktop with their friends in the virtual world of *Fusion Fall*. However, the students often chose to watch over each other’s shoulder and talk, rather than sitting across from each other and viewing the game from their own screens.

We observed students participating in loud, humorous, and continuous talk during game play. They commented on the way other players looked, progressed, and performed in the game and frequently made references between their online play and their real world appearance or athletic performance. This talk was ongoing and often was coupled with bragging. The students referred to this as “trash talk” and “smack talk”. It was similar to the banter that one would find in friendly, casual, physical games.

Madden NFL was a game that all of the students were acquainted with. They chose to compete in one-off games rather than

developing a team. This may be due to the single session of observation, but in our interviews, students noted that pulling out memory cards when playing sports games is a common practice. Students felt that it was *fairer* that way, and others could not cheat by developing a character’s attributes. The talk was often about the real life football players and teams that were represented in the game. The students went to great lengths to talk about how it was just like *real* football, and rarely noted how the video game play was different than a physical game of football.

Fusion Fall was the first massive multiplayer game that the students had played. The students did not immediately understand how to “level up” or the more complex elements of the game economy. However, after the first session they seemed to understand how the game was organized, and began advancing rapidly. They had little interest in exploring the rich world made up of Cartoon Network references and characters, and rarely mentioned the characters except during the startup, when short video clips were shown. They did know, and seemed to like, many of the cartoon characters. Their primary concern was with advancing faster than the each other. When one student had advanced much further than the other students, due to extra time playing, the competitive nature and interest in the game fell off.

4.3 Interviews

The interviews highlighted a number of ways that the students’ identity is defined, partially, by their racial identity. Particularly, being African American seemed to play a significant part in their construction of masculinity. While students did not display any overt awareness of a racial identity, there were indications of racial identity in the trash talk, the emphasis on athleticism and sportsmanship, their lack of emphasis on agency with the game technology, the movies and music they referenced, and the characters they chose to play in video games. In this section, we will outline our findings from the interviews with a focus on the competition, sports, technology, and socializing with games.

4.3.1 Confidence and Competition

Consistent among all 13 interviews, students expressed feelings of confidence and skillfulness with games. Some of them associated their game play with personal traits such as creativity. As Darnel³ explained, “I have the creative side, the challenge side, and I have the mature side, which gives me the advantage.”

It was apparent that being competitive against others and the game itself was of value to the students. Jamal expressed this by bragging about his skillfulness compared to other players. “If a friend come over, and like say you just playing...I wan to put my friend inside [the game] and beat him.”

Most of the students talked about their competitive nature with pride. They felt that being competitive reflected well on them as a person who likes a challenge and is not afraid of difficult things. As Devan described, “I am a competitive person. I like to play against somebody ...If I am playing against somebody, I am a competitive person...I like to win, so I like to play other folks then.”

4.3.2 Different Reality

More than half of the students commented that games allowed them to express feelings or actions they couldn’t express in real

³ All students’ names have been changed.

life, or about games being different than reality. Some commented about playing games such as *Grand Theft Auto* that allowed them to act out without any real world repercussions. Some commented on interacting with characters, such as football players, that they would never get to meet or play in real life. The common theme among these students' examples was an escape from reality. As Antwan explained, "I like playing games because you can steal cars, shoot stuff, and blow stuff up. You can't do that in the real world. In games, it is nice you don't have any consequences."

Similar to escaping reality by doing things in games that they could or would not do in reality, a few students talked about games providing a way to express anger. Interestingly, none of the students reflected on shooter or fighting games as a way to virtually express anger. While they played these games, they always talked about them with a bit of humor, understanding that the absurdity of games like *Fight Night* and *Grand Theft Auto* was part of the fun of playing them. When talking about expressing real feelings—in this case, anger—Jamal referred to *Madden NFL*: "It's fun, and it's a way to get away from.... from stress in stuff. Like in Madden, you hit somebody real hard and it's like...ooh, I got him. Hit him just real."

4.3.3 *Sports and Sportsmanship*

Our interviews support earlier findings that young African American men do not treat virtual sports and real sports similarly. Sekayi expressed that games were an additional way to play sports: "I go outside, me and my brother, we play football. Then everybody is just playing football. And then, I just like, when I go into the house I get that urge and then I just want to play more football...so I just pop in a sports game." Darnel believed that real-world football knowledge helped one's game play in video football games: "When you don't feel like getting up physically playing, like with your body and stuff...You got to know how to play football, and you got to know everything about Madden in order to succeed."

Just as in sports, the students put a high value on sportsmanship. The use of modifications, cheats, and strategy guides were limited in to use in non-sports games. As Sekayi explained in his use of cheats and modifications, "Yeah, in other games like adventure games, I use cheat codes like extra health, infinity health, all the moves...but most sports games I haven't seen any Easter eggs, or cheat codes."

Some students chose not to use cheats in any game. Xavier explained this choice as a reflection of his character and gaming skills: "I don't use cheat codes anymore. I found out that cheat codes are just really cheap. I mean I want to beat the game, and I don't want to be a cheater."

In sports games, the definition of cheating was extended; any sort of modification to the game was considered cheating. When we asked Charles about using cheats in his favorite game, *NBA*, he was embarrassed to admit to switching sides when playing when playing alone if his team was far behind. Charles said, "The cheat, it says like options, then I go to that, and then you can switch sides. That is pretty much what I do." And Sekayi commented that the standard for playing sports games was to remove all memory cards so that no player had more experienced characters.

4.3.4 *Technology, Computation and Gaming*

Contrasting earlier findings, most of the students played online games, and many had high-speed Internet access. Rather than

computers with Internet access, however, we found that most had Internet access through their cable television provider to enable online play on console game systems like Xbox and PlayStation 2. Only three participants had access at home to a personal computer that had an Internet connection. One student had access to a networked computer at his grandmother's home where he spent time frequently, and one participant had a computer with no Internet access. Even those three with computers and Internet access had limited access to the computers. As Charles explained, "My mom has the AOL, and she has to put the Internet cord into it. I only use the internet cord for Xbox."

We asked about technical problems and probed students about learning computing skills from gaming or setting up gaming systems. The students did not report any other personal experiences with technical issues or learning.

4.3.5 *Social Experience with Games*

Social play was important, not in connecting with strangers online, but with known associates in the room. Many students played games exclusively with family members. Students provided many examples of playing with male friends, brothers, male cousins, uncles, and fathers, but only one student mentioned playing with a female, his "auntie."

Darnel expressed that games were a way to bridge age gaps with family members: "I got friends and family and stuff that play games and we have competitions...Even my dad still plays games. I play games with my dad, my older cousin, he is what, like twenty-five or something."

A few students commented on social pressure to play *Madden NFL*. They indicated that it was not a favorite game, but they played and practiced to keep up with their friends. Xavier mentioned that he had started playing *Madden NFL* after his friends had mastered it: "I play sports games, mostly *Madden*, because I have to, with friends."

Over half of the students said that they preferred to play alone *at times*. The deciding factor in playing alone was the type of game. Action and adventure games were solitary pursuits, while sports games were social. However, those that played action and adventure games online with other people still considered this playing "alone." As Antwan explained, "When you play on the computer (online) you don't get any good feedback. When you play with your friends (in the room), you get little smart comments from your friends and stuff."

Dion expressed similar discontent with online play: "I play differently than people around me (online). I am a team player, I think everyone online, they leave people and don't make sure everyone gets their experience (points in the game)." Xavier was one of the few students who played online regularly. Even he had a number of reservations about playing online, because of unfair play and poor attitudes among other players. Xavier mentioned, "Fighting games, sometimes I like to play by myself, because people online, they talk a lot of trash."

5. DISCUSSION

This study provides us a better understanding of the impacts of cultural and gender identity on play practices of African American men, and helps us in exploring the relationship between play practices and interests in computing. The majority of efforts to address broadening participation in computing, including the use of games, have focused on gender issues with the goal of making

computing a more viable career for women. These research efforts have examined the differences in gender as opposing sides of a coin, masculine and feminine. Often studies only reflect on the “masculine” traits of gaming or computing culture as a contrast to the “feminine.” The literature shows that in the culture of computing, masculine traits such as competition, defensiveness, risk taking, and asocial behavior are encouraged. On the other side of the coin are feminine traits, such as being cooperative, open, risk-averse and social [3,36,45]. However, masculine and feminine identities are far more complex than this dichotomy. Gender identities are also situated in culture, race, age, socio-economic status and geographic factors. Overlooking masculinity as its own unique and varied identity rather than the assumed norm is not unique to education and game studies, as Kimmel and Messner noted:

Too often...we treat men as if they had no gender, as if only their public personae were of interest to us as students and scholars, as if their interior experience of gender was of no significance...Men often think of themselves as genderless, as if gender did not matter in the daily experiences... [28]

By treating the problem as one of gender, without considering variations in the constructs of masculine identities, we are overlooking efforts to be more inclusive of African American males.

Idealized masculine identities in CS and African American cultures have noted differences. We address these differences not because they reflect what all, or even most, computer scientists’ or African Americans’ value, but because these masculine constructs are held up as something to attain, or to consciously reject.

5.1 The Masculinity of Geeks

The masculine identity within CS has been examined by a number of researchers conducting qualitative fieldwork with college students, notably Margolis and Fisher [36] and Turkle [44]. However, with some exceptions [11,22], the intersection of race and gender has not been a significant factor in these CS education studies. As Margolis and Fisher [36] report there simply were not enough number of African Americans CS majors at Carnegie Mellon University to make any findings trustworthy and credible. While Turkle [46] does not explicitly address race, one can interpret from her description of “pale faced” geeks, that most of the students she was studying at MIT were white.

Margolis and Fisher speak to the pressure for women in the CS department to fit in with masculine identity traits. One trait required is early and intense passion for computing. Men in their interviews spoke about how they valued their early exposure and tinkering with computers. It was often how they spent most of their time, playing around and taking things apart. They identify this as the “magnetic attraction” that some young men feel for computers. This attraction leads them to early experimentation, development of communities of practice, and skills with computing that others entering into CS may lack. It is something they boast about. While their pride in their abilities maybe rightfully placed, it places those who don’t have this early passion as the “other” in computing culture. This means students identify two types of CS majors, those that are connected to computing and the “others”, those who did not experiment and participate in communities of practice. These outsiders to CS often come from homes, cultures, or have a gender identity where early and frequent exposure to computing was not encouraged or expected.

In Levy’s [35] book *Hackers: Heroes of the Computer Revolution*, he presents an idealized version of the founding fathers of CS. According to Levy, this ideal hero is male and has little time for women or physical relationships, contending that they take precious time away from the idealized singular goal to be on the computer all the time. Many similar accounts of the computer geek rejecting the physical side of life for a more cerebral life are echoed across literature. Turkle’s account of the hacker identity at MIT in the 1980’s is a tribute to rejecting the body. She recounts the paradox that many of the CS majors feel about being in the physical world and having human relationships versus committing oneself to the mastery of the computer. In the world that Turkle describes, the big man on campus is not the all-around good guy, athlete, or the successful Don Juan. It is the one who rejects care for his body and appearance, relationships and sleep, all to devote himself to the higher calling of computation.

5.2 Masculinity and African American Men

Some constructs of African American masculinity have materialized through problematic mediatized depictions and racialization. Page argues that:

racialized and gendered information inscribed in contemporary black male imagery is racially filtered through the media and trains the national audience to suspiciously regard and viscerally react to African American men’s physical features and patterns of interaction. [39]

Pre-occupation with African American sexuality and bodies have also contributed to constructing an anti-intellectual depiction of African American masculinity. According to Richardson’s [40] reflections on black masculinity in the southern United States and scholarship on the African American image in athletics [19,37], this strong identity with the body in athletic competition and sexuality can be traced from historic roots in American slavery through the racialization of athletics and science.

Miller illuminates how taxonomies of racism found in earlier scientific studies fed social and cultural attitudes regarding blacks’ athletic achievement. He points out variances and alterations in language when authors describe the athletic achievements of whites versus blacks. When writing about black dancers and athletes, authors often focused on the body and attributed extraordinary skills to innate abilities. Conversely, when highlighting whites accomplishments in dance and athletics, authors emphasized intellectual prowess, discipline, and fortitude as explanations [37].

These racialized body-centric models of African American masculinity have been repeated so often in media, literature, scientific discourse, and commentary that they have caused friction in identity construction within the African American community. Co-opting Eurocentric masculine identity has proven equally problematic for African American males because it ignores the traditional egalitarian inter-gendered relationships and the communal inter-generational relationships within the African American culture [31]. The boundaries of inclusion and exclusion marked in mainstream American “delineates the parameters of embraceable and unembraceable African American male subjectivity” [39] and invade the culture of CS as well. African American men struggle to construct a gender identity in the midst of these constant conflicts. As a result, negotiating between the norms and boundaries prescribed by the dominant culture, the values of an African American subculture, and the gender issues of African American masculinity often causes African American

men to seek mechanisms of survival and connectivity rather than agency and independency. The implications for this choice stand out in comparison to the geek culture where technological agency is a key signifier of masculinity.

5.3 Race and Gender in Play Practices

Our findings indicate that while young African American men play video games frequently, their objectives in playing may be unlike those who enter computing-related fields. They often played for social reasons: to connect with family, to practice for future social situations, and to have fun talking and “clowning” with their friends. They did not consider online interactions to be social ones. Video games were seen as something that was fixed, similar to TV, rather than a medium they could manipulate. In this way, games were a medium. They used games not as a medium for online communication, but as a device that offered activities for socializing in the real world.

These play practices align with the literature on African American masculinity and offer us some insights into interpreting the differences in play practices and technological agency between geeks and African American men. In this way the cultural experiences of athletics and sports, body-centric masculinity, and communal inter-generational relationships shape the play practices of many young African American men. For the geek culture, the emphasis on agency with technology may shape the play practices, resulting in hacking, cheating, and modding.

However, there are similarities in the masculine identities of both groups. A high value on competition and confidence in their skills with the devices were found in both identities. Closely tied to the high value on competition and confidence, both groups use game technology as a social lubricant.

The participants’ Internet access through digital game platforms, rather than computers, may be tied to economic or class issues, but also may be a cultural artifact of the play preferences for console game systems which better accommodate in-room and inter-generational socialization play practices. In either case, the impact of playing online through console systems rather than personal computers results in greater barriers to agency with the computational aspects of games.

6. FUTURE WORK

The selection of video games as an artifact for exploring the identity constructs around technology was based upon their popularity among young African American men. We found that not only are video games popular, but game consoles often are the most powerful computational devices and the only Internet-enabled devices in our participants’ homes. Significantly, we found video game use was both social and gendered, suggesting that video game play practices can offer us a chance to observe construction of race, gender and technology identity with in a cultural context.

Games can offer insights into the difference in identity and culture and how those differences contribute to construction of identity with technology. The close association with sports as a point of pride in manhood, versus computers scientists’ association with hacking and coding as masculine pursuits, gives us future research agendas to pursue regarding the intersection of masculine constructions and their impact on technology use across different cultural groups.

This study has provided background for designing learning interventions that leverage not only technology, but also cultural values and practices. We have outlined four implications for examining cultural play practices when designing learning interventions with games:

- *Respect culture* – Seek to understand cultural differences in play practices and prioritize cultural values.
- *Affordances in play practices* – Find opportunities for learning interventions in students’ current play practices.
- *Affordances in cultural values* – Find opportunities to support learning through the cultural value of games.

Implications of the study have lead us to develop the Glitch Game Tester project [8]. The successful implementation of Glitch suggests that targeted studies of play practices and cultures of players can be a useful tool for designing future learning interventions with games.

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