

Journal of • Virtual Worlds Research

A woman's face is shown in profile, looking towards the left. Overlaid on her face and the background is a complex digital circuit pattern in shades of blue and white. The background is dark blue with glowing white dots and lines, resembling a network or data flow. The woman's eyes are visible, looking directly at the viewer.

jvwresearch.org ISSN: 1941-8477

Assembled 2018

Part 2

August 2018 Volume 11 No. 2

Art by: Gerd Altmann • Freiburg/Deutschland

Volume 11, Number 2

Assembled 2018 (Part 2)

August 2018

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Journal of Virtual Worlds Research

jvwresearch.org ISSN: 1941-8477

Volume 11, Number 2
Assembled 2018 (Part 2)
August 2018

Representations of Africans in Popular Video Games in the U.S

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Abstract

Studies investigating the representation of Africans and other ethnicities are scarce in video game literature. Using a content analysis approach, this paper examines Africans' representation in ten of the most popular games of 2014 in the United States based on industry market research reports. The findings show that Africans are underrepresented in video games explored in this study. The study also reveals that African characters in these games did not play leading roles in the storyline. Results are discussed as they pertain to Africans' representation in video games, media effect, and media literature. This exploratory study broadens the discussion on representation in video games to other ethnicities and shows the need for studies on representation in contemporary video games that include understudied ethnicities.

1. Introduction

The gaming industry is booming! According to the Entertainment Software Association (2017), the trade association representing the US video game industry, video games contributed \$11.7 billion to the US economy in 2016, and supplied 65,678 jobs. In terms of consumer spending, \$30.4 billion was spent in 2016, compared to \$23.5 billion in 2015 (ESA, 2017). The industry's growth is also noted in the number of viewers visiting live streaming video platforms such as Twitch. The website reports more than 15 million daily visitors and two million monthly broadcasters (Twitch, 2017), converging for varied reasons, including a desire to focus energy at something one is good at or enjoys (McGonigal, 2011).

Video games enable players to connect with the game content and each other in novel ways (Bronack, 2011). As a result, many researchers are exploring the affordances and learning opportunities video games foster for the 21st-century learner (Bronack, 2011; Warren, Dondlinger, McLeod, & Bigenho, 2012). Video games can be played multiple times, and across settings, making them ideal teachers because they offer reinforcement as players immerse themselves in the virtual environment, and learn by playing (Behm-Morawitz, Hoffswell, & Chen, 2016; Gabbiadini & Greitemeyer, 2017). Moreover, video games are learning spaces, frameworks that engage players and help them think (Steinkuehler, Squire, & Barab, 2012).

Video games, from a visual media perspective, are a new form of media that can affect user's perceptions of reality, identity, and others (Jordan, 2014; Saleem, Prot, Anderson, & Lemieux, 2017). Studies on representation in video games have mostly focused on gender, sexual orientation, and race (Dietrich, 2013; Near, 2013). These studies reveal that representations of gender, race, and sexual orientation do not reflect reality, and that the occasional depictions of women and racial minorities are stereotypical (Poor, 2012). Hence, close attention should be given to the portrayal of various underrepresented groups in video games (Maclean, 2016). This is particularly important because depictions in virtual environments tend to threaten the social identity of individuals from historically underrepresented groups in non-virtual environments, and affect viewers' perception of real-life interactions (Lee, 2014; Saleem et al., 2017).

Researchers have investigated the portrayal of minorities such as Arabs (Saleem & Anderson, 2013), and African Americans (Passmore, Yates, Birk, & Mandryk, 2017). Yet, little in the literature is found about the representation of Africans in video games. Indeed, compared to other groups, the image of Africans in the media is usually negative (Lugo-Ocando & Malaolu, 2015; Stupart & Strelitz, 2016). Investigating representations of different ethnic and racial groups is critical because media can shape one's perception of self and others in ways that can create understanding, fear or suspicion (Saleem, Prot, Anderson, & Lemieux, 2017; Skey, 2014). Therefore, this paper proposes to contribute to research on representations in video games, by focusing on Africans' portrayal in four games out of the 2014 top 10 United States games. We begin by presenting a review of the literature on representations in video games, our research questions, findings, and conclude with a discussion.

1.1. Race Representation in Video Games

Research addressing the question of representation in video games reports that the portrayal of minorities such as women, or Blacks is limited, and often stereotypical (Passmore et al., 2017, Poor, 2012). Referring to non-White gamers' growth, Passmore et al. (2017) interrogate the decline of racial diversity in video games. In their study of racial representation in 80 indie games, which Garda and Grabarczyk (2016) define as video games that enjoy financial, creative, or publishing independence, Passmore et al. (2017) found limited racial diversity in game characters and argued that White characters constituted the majority. The authors argue that the lack of racial diversity follows the game industry racial representation (Passmore et al., 2017). In a 2015 study, Friedberg

examined the representation of African Americans, Latinx, and Asians in the top 10 video games of the years 2007-2012. His study revealed that African-American and Asian characters made up 3% of the main characters, and Latinx approximately 1% of the top 10 video games. However, 67% of the main characters were White with no Indigenous playable characters (Friedberg, 2015). Dietrich (2013) found similar results in his study of over 60 multiplayer online role-playing games and twenty offline role-playing games. Most of the online video games did not allow for the creation of “avatars with a non-White racial appearance,” which has the potential of inadvertently making whiteness the default racial ethnicity of game characters (Dietrich, 2013, p. 82).

Literature shows that ethnic and/or racial minorities compared to their White peers are both underrepresented and misrepresented in video games (Passmore, Birk & Mandryk, 2018). However, in relation to gender, Lynch, Tompkins, van Driel, and Fritz (2016) found an increase in female playable characters in video games released between 1983 and 2014. It should be noted that female characters were mostly depicted more in secondary roles (Lynch et al., 2016). Even with an apparent increase in representation, female characters roles are often determined by the male protagonists in the games (Perreault, Perreault, Jenkins & Morrison, 2016). With regard to Africans in video games, a recent analysis of Resident Evil 5 (RE5) by Martin (2016) contends that Africans’ representation in the game is driven by colonialist ideologies. The choice of scenes is not to be ignored, the portrayal of African characters as zombies, thirsty of blood, exposes the problem of racial identity based on Western assumptions about Blackness (Brock, 2011; Geyser, 2013). For Martin (2016):

The theme of a White hero’s adventures in darkest Africa ... could certainly be seen as part of a strategy to give overseas markets the content they are perceived to want. It is equally clear that the images of Africa we get in RE5 are mediated by the representation of Africa in a global popular culture with its roots in the West (p. 3).

The game helps players reenact “the gendered and racial logics of colonialist adventure through player involvement”. (Harrer & Pichlmair, 2015, p. 13). Hence, video games with African settings or characters perpetuate an ideology because developers often draw on “longstanding cultural grammar when assigning racial representation of the hero and the other to the affordances of play (Harrer, 2018, p. 4). The limited presence of non-White characters in video games has pushed some researchers to argue that video games are becoming another platform where stereotypes are reinforced, and where the impact of underrepresentation or stereotypical representation of non-White characters on players is not to be ignored (Harrer, 2018; Passmore et al., 2017). This research suggests that Africans depiction in video games still remains scant. With the exception of few studies (Brock, 2011; Harrer, & Pichlmair, 2015; Harrer, 2018), research on Africans’ portrayal in video games has not received much attention in the literature. Nevertheless, media studies literature has addressed Africans’ representation in Western media. Considering that video games are a new form of media, this literature can provide insights and useful background for our discussions on representation of Africans in games.

1.2. Africa and African Representation in the Media

Africa and its inhabitants have often been placed in a position of subservience dependence and viewed as savages in need of “enduring civilizing intervention and colonization” (Omobowale, 2015, p. 109). This logic of racial superiority and inferiority formed during the European slave trade informs the portrayal of Africans in Western media (Omobowale, 2015). Africa is often associated with death, disaster, debt and famine in American and Western media in general (Lugo-Ocando & Malaolu, 2015; Stupart & Strelitz, 2016). Perceptions of Africa as a perilous place through the focus on stories of war or conflict is consequently perpetuated by the media (Adegbola, Skarda-Mitchell, & Gearhart, 2018). These negative representations reinforce Westerners’ perception of Africa as the “hopeless continent” that needs to be helped, ordered, and led to solving her problems (Harrer, 2018;

Omobowale, 2015), and a view of Africans as lacking agency, and helpless (Baker, 2015; Harrer, 2018).

The literature suggests that Western media still convey degrading messages on Africa and Africans. It becomes therefore relevant to explore Africans' depictions in video games in order to understand whether stereotypes about Africa and Africans are perpetuated in this new form of media.

1.3. Why Does Africans' Representation in Video Games Matter?

Video games are accessible to an ethnically diverse range of players (ESA, 2017). Despite the lack of data on players from African ethnic background, the surge of African immigrants in the US makes relevant this inquiry because players from different ethnic backgrounds are more likely to interact with an African in the U.S today than they were 30 years ago (Arthur, 2016). Indeed, Africans "are increasingly becoming a visible part of the migration of skilled and unskilled people leaving the developing countries to settle in the USA" (Arthur, 2016, p.1). Africans constitute four percent of immigrants in the US (Gambino, Trevelyan, & Fitzwater, 2014), and chances are that this number will rise with the predicted growth of immigrants and their descendants in the US (Pew Research Center, 2017). This growth also implies the presence of Africans in different sectors of life in the US (e.g., K-16 settings) where they interact with peers from different races and ethnicities. In fact, a 2018 Pew Research Center report indicates that the US is increasingly racially and ethnically diverse, with suburb areas gaining more population from international and domestic migration than rural areas. Given that images in video games can affect the cognitive knowledge structures of players (Dudo et al., 2014), by creating mental models in their minds, stereotypical representations can distort players' perception of Africans. Indeed, cultivation theory explains that exposure to media content shapes viewers' conceptions about the world they live in (Shrum, 2009). Consequently, just like television and other forms of media, the message (e.g., depictions) of some ethnic or racial groups in media such as video games cultivate and construct popular culture and public beliefs about these groups among players (Potter, 2014). Furthermore, media priming theory suggests that some media content can trigger in individuals certain thoughts and behaviors related, or similar to media presentation (Cicchirillo, 2015). As a result, media portrayal of some groups, or individuals, can build in consumers' attitudes and beliefs that align with the media depiction of a specific group. Therefore, video games that suggest racial cues can affect behaviors and attitudes of players toward a racial or ethnic group (Yang et al., 2014).

Building on the literature on representation in video games, we survey the content of the most popular video games in the United States in 2014. Popular games in the United States in this study refer to the most sold video games in 2014.

2. Research Questions

Misrepresentation and underrepresentation in any form of media, and particularly in video can affect perceptions, and the identity construction of members of the invisible and ill-represented group (Saleem et al., 2017). The present study is guided by two questions: how frequently are Africans represented in the most popular video games in the United States, and what roles (i.e., leading or supporting) are African characters playing in these video games?

3. Method

3.1. Game Sample

This study examined the ten top-selling video games in the USA in 2014. A sample of the games was obtained from a major gaming news and reviews website, known as Image Game

Network (IGN). IGN obtained its rankings from the NPD group, which is a global leader in market research in terms of retailers, manufacturers, and consumer-purchasing behavior information, the NPD group. A complete list of the games can be found in Table 1. Since the top ten selling games best represented what gamers actually played, a purposive sampling approach was deemed appropriate for the study.

The 10 games were divided into two categories: character creation, which refers to games with avatars or character customization features (e.g., *Destiny*, *Minecraft*, and *Super Smash Bros*) and the collective sport games category (i.e., any sport videogame representing a team of players working together towards a collective objective). This group contained games such as *NBA 2K15*, *Madden NFL 15*, and *FIFA 15*. This categorization allowed us to exclude games in the character creation group because these did not allow for the identification of characters as portrayed in the games, and consequently could not help us answer our research questions. Sport games were excluded from the analysis as well because they featured names and characteristics of real teams and players. For example, *FIFA 15* is a collective sport game and was removed from this analysis because it is a simulation of the federation international de football association (FIFA), which is the international governing body of 209 football/soccer associations and as such, the game contains real names of players from different nationalities. The criterion of nationality was also added to select the games in our analysis. Therefore, non-sport games and games with no customizable features that provided characters' nationality were included in the analysis. As a result, *Call of Duty: Advanced Warfare*, *Grand Theft Auto V*, *Watch Dogs*, *Call of Duty: Ghosts* were selected from the top 10 games for our study (Table 1).

Table 1: List of top ten selling video games in 2014

Games	Platforms
Call of Duty: Advanced Warfare* ¹	360, XBOx, PS4, PS3, PC
Madden NFL 15	360, PS4, XBO, PS3
Destiny	XBOX, PS4, 360, PS3
Grand Theft Auto V*	PS4, XBOX, 360, PS3
Minecraft	360, PS3, XBOX, PS4
Super Smash Bros.	3DS, NWU
NBA 2K15	PS4, XBO, 360, PS3, PC
Watch Dogs*	PS4, XBOX, 360, PS3, PC, NWU
FIFA 15	360, PS4, XBOX, PS3, Wii, 3DS, PSV
Call of Duty: Ghosts*	360, PS3, XBOX, PS4, NWU, PC

3.2. Data Analysis and Procedure

The variables used in our analysis were shaped by our research questions and are comparable to those in previous studies. For instance, the selected games were analyzed for nationality (African/non-African) of the characters in the game to differentiate for example African-Americans from Africans. In this paper, we adopt an Afropolitan perspective of African identity and limit the meaning of African to nationality. Even though discussions on African identity has engaged researchers since colonization, in recent years, being an African has moved beyond, geographical location, skin color, and ancestry (e.g., genetics), to embrace the complexity and diversity of Africa

¹ Note: Platforms are listed from the top-selling to worst-selling platforms for each game and games with asterisk (*) were the four games analyzed in this study.

(Eze, 2014). From an Afropolitan perspective, an African is one who is “both rooted in specific local geographies but also transcendental of them” (Gikandi, 2010, p.9). Therefore, to be an African “is to be connected to knowable African communities, languages, and states. It is to embrace and celebrate a state of cultural hybridity to be of African and other worlds at the same time” (Gikandi, 2010, p. 9). However, for the purpose of this study, we limit our definition of an African to an individual connected to a specific country on the African continent. The second variable was the role of the characters. Drawing on Jansz and Maris (2007), Mou and Peng (2008) studies, characters’ roles were analyzed in terms of leading role and supporting role.

Three sources of information were used to research and categorize characters in terms of nationality and role in the game: the game official sites, IGN site, and Wikia.com sites of each games series. Wikia.com is a wiki-like model site that claims over 400, 000 communities for fans, by fans. According to the site, it is “the best source of accurate, dynamic, and fresh fan-authored information that is fueling virtually all aspects of popular culture”. We found the Wikia site of each game useful in identifying each characters nationality, role in the game, and the game narrative. IGN, as one of the leading gaming sites in the world, makes available information related to gaming and other forms of entertainment. The site was an additional source of data on the leading characters, their background in the game, and the game storyline. In addition to the backgrounds of leading characters and the different features in the games (i.e., customizable items or playable characters), the game sites provided the video games plot.

Using information from all three online sources, the total number of games was reduced to four. As previously stated, games allowing character creation (e.g., skin color) or customization, and/or not providing characters’ nationality were not included in the analysis. In addition, collective sports games were excluded from this analysis because they either did not provide characters’ nationality and/or were the simulation of real characters and teams (i.e., Madden NFL 15, NBA2K 15, and FIFA 15). Each game was then coded for character’s nationality and character’s position (leading/supporting). To ensure reliability, two coders were used. Using statistical software (SPSS) the coded games were analyzed to assess the representation of Africans in the top selling video games in the USA in 2014.

4. Findings

The analysis of the four games resulted in a set of 424 characters. Of the 424 characters identified in the game sample, 85.6% (330) were not Africans, 0.5% (two) of the characters were Africans, and 13.9% (59) had no reported nationality. Table 2 provides an overview of the results. In terms of country, the United States had the most characters represented (74.3%). This pattern was repeated among the leading characters. With regard to position or role played in the games, in a total of 32 characters playing a leading role, 84.6% (27) were Americans and 15.6% (five) were characters from countries such as Canada, Ireland, Russia and, Venezuela. The supporting characters were more diverse, even though Americans constituted again the largest group (73.5%). All the African characters, two (100%), in the game played a supporting role.

Table 2: An overview of the results

Variable	Category	Leading	Supporting	Total
Overall	Character	32	392	424
Nationality	African		2	2
	Non-African	32	331	363
Country	United States	27	288	315
	Nigeria		2	2
	Other	5	43	48

Table 3 displays distribution of nationality by games. Call of Duty-Advance Warfare is the only game in this sample with African characters. Other games in the sample do not have characters of African nationality.

Table 3: Nationality of characters by game

Variable	Category	African	Non-African
Games	Call of Duty-Ghosts	0	31
	Call of Duty-Advance Warfare	2	22
	Grand Theft Auto V	0	281
	Watch Dogs	0	29
Total		2	363

The African characters in Call of Duty Advance Warfare, Ajani (Nigerian Army Captain), and Samuel Abidoyo (Nigerian Prime Minister) roles are secondary. Both African characters do not play a leading role in the storyline, which is set in Nigeria. While attending an international conference, in Lagos, Nigeria, Samuel Abidoyo is kidnapped by a terrorist group. However, Jack Mitchell, the main protagonist and a former US Marine Corps, leads a mission to Nigeria to rescue the prime minister. Ajani's role is to assist Mitchell and his team, even though he is a captain in the Nigerian Army, and should be able to lead the rescue mission without international involvement. Yet, a US-trained marine with his team had to be sent for the rescuing of Samuel Abidoyo from the hands of the terrorist group in Nigeria.

5. Discussion

Our content analysis of the games' websites, fans' wiki-like sites and IGN site confirms the trend observed by previous studies: minority groups are underrepresented in contemporary video games (Passmore et al., 2017; Young, 2016). This study reveals that Africans, as a group, are invisible in our game sample. The study also shows that African characters in the game often play a supporting and not a leading role.

These findings align with the literature on Africa's inferiorization in Western media (Adegbola et al., 2018). For example, in the game Call of Duty: Advanced Warfare, to rescue the kidnapped-Nigerian prime minister, the Nigerian troops are assisted by American characters from a private American military corporation. This narrative in the game storyline, one may argue, portrays Africans as dependent on others, especially on western countries such as the United States, for assistance. One would be hard-pressed to find a reverse situation whereby Nigerian troops or any

African military is the one rescuing a president of the USA. Indeed, the depictions of Africa in Western media is that of dependence and crisis-driven continent (Adegbola et al., 2018; Omobowale, 2015). In this regard, the game perpetuates this stereotype inherited from colonial ideology (Bonsu, 2009) and thereby serves to sustain a narrative.

Furthermore, video games such as Call of Duty: Advanced Warfare, seem to reproduce through the narrative of Africa as the “hopeless continent” that needs help (Omobowale, 2015). The kidnapping of the Nigerian prime minister is an illustrative example of mirroring the established narrative in the media: Africa is a dangerous and perilous place (Adegbola et al., 2018; Omobowale, 2015). Thus it can be argued that game developers were inspired (whether knowingly or unknowingly) by the colonial rhetoric about Africa, and used that colonial lens or rhetoric to write the game storylines (Harrer, 2018). Players of Call of Duty: Advanced Warfare are likely to store in their minds stereotypes about Africa and Africans, which may also affect their worldviews and perception of Africans (Harrer& Pichlmair, 2015).

Given media effects on individuals’ perception of reality, the underrepresentation of Africans coupled with their roles in the game may cause them to become “invisible” to the players (Williams et al., 2009). Additionally, from a social cognitive theory perspective, players’ knowledge structure may be affected as a result of playing these games (Dudo et al., 2014). ,

A few years have gone by since we first embarked on examining the issue of African representation in video games. Although many games have been produced since, the latest data of top games in 2017, show that the rankings remain similar. Moreover, our search yielded no African characters in the games from 2017 that fell within our inclusion criteria.

Table 4: Best selling games for 2014 & 2017 (NDP group)

	Best-Selling Games Of 2014	Best-Selling Games Of 2017
1	Call of Duty: Advanced Warfare	Call of Duty: WWII
2	Madden NFL 15	NBA 2K18
3	Destiny	Destiny 2
4	Grand Theft Auto V *	Madden NFL 18
5	Minecraft	The Legend of Zelda: Breath of the Wild
6	Super Smash Bros.	Grand Theft Auto V
7	NBA 2K15	Tom Clancy's Ghost Recon: Wildlands
8	Watch Dogs *	Star Wars: Battlefront II 2017
9	FIFA 15	Super Mario Odyssey
10	Call of Duty: Ghosts*	Mario Kart 8

Even in 2018, issues of diversity and representation of Africans in video games remain. As Geyser (2018) noted, the lack of diversity and representation manifests in terms of content and the lack of diversity of designers in the industry. However, what is different and could possibly alter the course of video games on the continent is that more African-based video game design studios are coming into existence and are gaining prominence not only on the continent but beyond. The International Game Developers Association, currently, has several chapters across the continent, which is further evidence of the inroads being made by African video games developers (Dahir, 2017, Nelson 2017; Usmani, 2016). The value of the video games market on the continent in 2017 was estimated to be worth over \$700 million (Dahir, 2017). Since this area is still developing, more

research is needed in not only how Africans are being represented in games outside the continent, but also on how Africans are now representing themselves.

In this paper, we explored Africans' representation in a small-scale video sample. Our findings show that Africans and underrepresented groups in these games, and even in games with a setting in Africa, African characters do not play leading roles. This research begins the discussion of authentic African representations in all media. Though it can be argued that compared to their proportion in the American population, Africans are overrepresented in the study sample --3.9 percent of all immigrants in 2009 (McCabe, 2011). Statistics from the USA Census Bureau (2015) reveal a continued increase in the number of immigrants in the United States. With a projected growth of up to 51 million by 2023 and 78 million by 2060 (USA Census Bureau, 2015), it can be anticipated that the number of African immigrants will grow. Thus, addressing Africans' representation as well as other ethnic minorities in games is relevant in an increasingly diverse and interconnected world.

5.1. Limitations and Further Research

The findings of this study are limited to a small sample of popular games in the USA in 2014. Thus, the results cannot be generalized. However, these findings do highlight the need to further examine ethnic minorities in studies of representation in video games. Further research needs to be conducted with a greater sample of video games to evaluate the extent to which current games reproduce stereotypes of Africa and her inhabitants. The implications of these depictions on players from different race/ethnic background perception of Africa and Africans as well as the effect of these portrayals on African players' identity formation are worth investigating.

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