New Media and Mass Communication
ISSN 2224-3267 (Paper) ISSN 2224-3275 (Online)
Vol.26, 2014

The impact of racial representations in video game contexts: Identification with Gaming Characters.

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Abstract
Video games can impact individual's identification with a character presented within that game. The following study examined the effect that racial representations (character race) in video games have upon identification, perceived similarity, and affective outcomes. Using two popular *Grand Theft Auto* video games participants rated their levels of identification and perceptions of similarity with characters of different races within that video game (White or Black characters/avatars). The results of this experiment show evidence that Black participants identified with and reported higher levels of perceived similarity with same race characters from a video game. Furthermore, the results showed significant differences for video games with racial representations (Black main character) for lower positive affect. This research shows significant and important findings for how individuals identify with characters in video game contexts. Furthermore, it extends research towards how identification with characters of race in media contexts impacts positive and negative outcomes. The theoretical implications of these results are discussed using the identification process of social influence.
Keywords: Race, Video Games, Identification, Affect

1. Introduction

Video game usage has become more popular within American society. According to the Entertainment Software Association (2010) sixty-eight percent of American households play video or computer games. Although a bulk of the research aimed at examining video game effects has focused upon aggressive outcomes (see Anderson et al., 2010) there is some evidence that points to positive effects. Video games are a form of entertainment media; the psychological appeal of playing these games is that they evoke a pleasurable experience (Raney, Smith, & Baker, 2006). An aspect that might influence this experience is identification with the video game character. Research has shown that physical similarity increases character identification in a video game context (Williams, 2011). A few researchers have even noted that the concept of identification with gaming characters is an understudied area of inquisition (Anderson, 2000; Schneider, Lang, Shin, & Bradley, 2004). Moreover, one understudied area in this regards is that of racial representations in video games and its impacts upon character identification.

Although some content analyses point to a lack of diversity in character representations (Lachlan, Smith, & Tamborini, 2005), there has been a new "urban" trend in video gaming which includes more Black characters in games like *25 to Life*, *Def Jams: Fight of NY*, and *Notorious: Die to Drive* (Marriot, 2004). Thus, some video games have portrayed stereotypical "urban" locations and settings while incorporating racial representations that depict criminal activities. For instance, it is noted that the video game *Grand Theft Auto: San Andreas* presents highly stereotypical images and story lines of African Americans and Black culture (Leonard, 2006 & 2009). Furthermore, a recent content analysis of video game magazines and video game covers revealed that minorities in particular African-Americans were often depicted as being stereotypically violent and/or athletic (Burgess, Dill, Stermer, Burgess, & Brown, 2011). The current study extends video game research by examining the effects of character race and third-person viewpoints (i.e., individuals see their entire character on screen) on outcomes related to positive affect as well as identification and perceived similarity to characters of a same/different race or ethnicity. Furthermore, this study examines if video game representations of race, primarily playable characters can impact cognitive perceptions of similarity, identification and overall experience with that game.

2.1 Identification and Video Game Characters

Identification is a multifaceted concept. For instance, there are two different ways at looking at identification with media characters, that of cognitive identification (Cohen, 2001) and that of similarity identification (Feilitzen & Linne´, 1975). 'Cognitive-emotional' identification with a media character is based upon a cognitive connection between an audience member and that media character such that the individual empathizes with and takes the perspective of that character (Cohen, 2001). On the other hand, similarity identification is a process by which viewers reinforce their identities and recognize themselves in that character through salient characteristics (Chory-Assad & Cicchirillo, 2005). Thus, for similarity identification to take place

an individual must look outside of their person to the media representation and assess levels of similarities between that character and themselves.

Specifically related to video games, Williams (2011) conducted an experiment in which participants 'skinned' (created a character physically similar to oneself) video game characters and then played a violent video game with that character. The results of this study found that 'skinning' did lead to higher levels of identification and higher reported levels of state hostility (Williams, 2011). Thus, this research shows that participants who played with a character that physically resembles them resulted in higher identification with that character, but also higher aggressive thoughts because of the violent-identification interaction. However, this research did not specifically examine the race of participants as influential factor. Schneider, Lang, Shin, and Bradley (2004) examined the effects of including a story narrative with a first-person game on identification, presence, emotional experiences, and motivation. The results of Schneider et al. (2004) show that participants who played a story-based video game (SBVG) compared to non-story based video game (NSVG) reported greater levels of identification and higher positive valence with their game characters and felt more presence within that game.

Eastin et al. (2009) found evidence to suggest that racial representations within a first-person shooter game influenced perceptions of identification among White and Black participants. For instance, the results showed that both Black and White participants were more likely to identify with a Black main character in a first person shooter game, this condition also elicited higher state hostility than playing as a White character (Eastin et al., 2009). The fact that white participants identified with a Black main character was attributed to the concept of *Cultural Voyeurism* in that individuals seek knowledge and gratification from minority representations (Appiah, 2004). However, this research is not without limitations. Eastin et al. (2009) used a futuristic video game (*Unreal Tournament*) with a first-person view point. The game offers little story narrative and individuals cannot see their characters on screen until viewed in a mirror strategically placed in the game environment. While the results of Eastin et al. (2009) are worthwhile their research lacks an examination of how realistic portrayals of African-Americans in stereotypical roles in video games can impact the identification process. Situational attributions are likely to influence the evaluations players have towards their characters (Shapiro, Pena-Herborn, & Hancock, 2006). Therefore, this research extends past findings by examining highly stereotypical depictions of playable characters (i.e., African-Americans) using a gaming manipulation known for such representations (see Leonard, 2006; 2009). Furthermore, this research employs third-person view points in a realistic gaming environment to examine identification and perceived similarity.

2.2 Racial Representations and Identification

One needs to understand how the psychological mechanisms of race, identity, and identification would likely influence the impact of video game representations. Kelman's (1961) identification process of social influence states that individuals will assess their level of similarity with a source and make subsequent judgments based upon the level of that similarity. Basow and Howe (1980) suggested that identification with role-models may be based upon the perceived similarities between that person and the role model. Feilitzen and Linné (1975) proposed that identification with television characters is largely based upon the level of similarity to those media characters, something they later refer to as *similarity identification*. Although other researchers (e.g., Cohen, 2001) have offered conceptually different definitions of identification, similarity does seem to play a role in the level of and amount of identification individuals have with media characters.

In terms of racial identity, Phinney (1992) found evidence to suggest that Whites consistently scored lower on an ethnic identity measure than members of ethnic minorities. Ethnic Identification is the process whereby a person identifies with and relates to the particular ethnic group to which he/she belongs (Phinney, 1992). For Whites, ethnic identification to being Caucasian is not an important describable characteristic. In fact research suggests that Whites are more likely to identify with media depictions of Black characters or other racial minorities (Appiah, 2001). For Black individuals skin color or race may be the source similarity trait that elicits the strongest identification with and favorability impressions of a media character. In support, studies demonstrate that Blacks have better recall for Black characters on television (Appiah, 2002) and have more favorable attitudes towards Black characters and the media in which they appear (Appiah, 2001). The research suggests that White and Black audiences use different underlying processes to evaluate source characteristics in the media.

Black people are more likely to describe themselves in terms of their ethnic group (Phinney, 1992). For Blacks being part of a numeric minority is very distinctive and they often make judgments based upon source characteristics such as race. The strength of ethnic identification may have important influences upon attitudes and behaviors. For instance, strong ethnic identity has been found to be a protective factor against the internalization of negative stereotypes of one's own ethnic group (Love, Yin, Codina, & Zapata, 2006). Strong ethnic identifiers tend to reject negative stereotypes and embrace a strongly positive identification with their ethnic group (Marsigilia, Kulis, Hecht, 2001). For White individual's race will not be an identifying

characteristic. However, for Black individuals the process relates more to identifying with individuals who are similar to themselves in terms of ethnicity. Therefore it was hypothesized that:

H1: *There will be a significant interaction effect between participant race and condition for identification. Black participants will be more likely to identify with the lead Black character in the video game, than White participants who play a video game with the lead White character.*

Furthermore, this study attempts to add insights into similarity perceptions with video game characters based upon third-person perspectives. Kelman's (1961) identification process of social influence holds that individuals are likely to make decisions about a source based upon the level of similarity with that source. Unlike, cognitive-emotional identification, similarity perceptions ask the individual to view themselves from outside of the character. In cognitive-emotional identification an audience member is asked to view themselves as that character taking their perspective (Cohen, 2001). Thus, similarity identification may hinder one's ability to take the perspective since an individual needs to imagine themselves from the outside (Cohen, 2001). Third-person viewpoints in video games may actually influence similarity perceptions because the individual sees the character on screen rather than taking their position (as would occur in a first-person perspective. We would expect similarity perceptions to be different than what was expected with identification in video games because of third-person view points. Therefore it was hypothesized:

H2: *There will be a significant interaction effect between participant race and condition for perceived similarity. Thus, Black participants will report higher perceptions of similarity with a Black main character, while White participants will report higher perceptions of similarity with a White main character.*

2.3 Video Game Narratives influence upon Positive Affect

According to Lee, Park, and Jin (2006) video games allow players to become co-creators of the narratives by "changing their behaviors and performance during a game" (p. 260). Thus, unlike books or movies the narrative structure of a video game is non-linear where the player interacts with the story and becomes a part of designing its structure. The inclusion of narratives within a video game may give players a sense of purpose when playing. Players may feel that they are justified in their actions because they identify or empathize with their characters plight (Hartman, Toz, & Brandon, 2010). As mentioned previously, the results of Schneider et al. (2004) showed that a first person shooter game with a narrative elicited higher identification and positive valence among players. Thus, the simple inclusion of a story narrative elicited higher positive affect and participants were more likely to identify with their character in a story based video game than a non-story based video game. However, video games have come to incorporate story narratives that can often be seen as stereotypical to African-Americans (Marriot, 2004; Leonard, 2006). One specific game that includes many African-American representations and a heavily stereotypical narrative is *Grand Theft Auto: San Andreas* (Leonard, 2009). Amongst individuals from different cultural and ethnic backgrounds the depiction of stereotypical narratives may likely draw different reactions. Moreover, the depiction of racial representations within a video game may negatively impact individuals experiencing positive affect of playing that game because of sensitivity to stereotypical representations. However it is not known to what extent this factor may impact those outcomes. Therefore a research question was posed:

RQ1: *To what extent do racial representations within a video game impact the outcomes associated with the positive feelings of playing that video game*?

3. Method

3.1 Participants

Data was gathered from 254 undergraduate students (111 Blacks and 143 Whites) from a large Midwestern university. Participants were recruited from courses in the School of Communication and from the Office of Minority Affairs on campus. Forty-eight percent were male and fifty-two percent were female and their age ranged from 18 to 45 years old (Md = 21, SD = 3.92). In the questionnaire, participants were given a list of racial and ethnic groups from which to choose. Only participants who identified as either "Black" or "White" were included in the analysis.

3.2 Procedure

The study used a 2 (Avatar Race) by × 2 (Participant Race) experimental design. Participants were randomly assigned to play either a video game with a lead Black character (*Grand Theft Auto: San Andreas*, Rockstar Games 2004) or a video game with a lead White character (*Grand Theft Auto III*, Rockstar Games 2001). Both games have similar story lines that focus upon revenge factors related to betrayal or the loss of a loved one. Thus, the two games are similar to one another with exception of the race of the lead character. Both video games were developed by *Rockstar Games* and have the exact same game play control. The video game without racial-representations and the lead White character (*Grand Theft Auto III*) includes little to no characters of race. *Grand Theft Auto III* does include a few characters of race at certain points in the game; however the participants played the video game at a point in the game in which these characters have not yet been introduced. The video game with racial-representations and a lead Black character (*Grand Theft Auto: San Andreas*) is

explicitly laden with stereotypical representations. These racial representations are common throughout the entire game (Leonard, 2009). Both games are a third-person shooter perspective, which means the view from the player's perspective is over the shoulder of their avatar or character. This allows the player to view their entire character/avatar from head to toe. Furthermore, this manipulation is different from past research on racial representations and narratives in gaming that only focused upon first-person perspectives.

4. Measures

Gender is a factor that should influence the level of identification with character seeing that both games lead antagonists are male characters, therefore gender will be included within all analyses as a covariate.

4.1.1. Outcome measures

4.1.2. Positive Affect. Positive affect was measured via a lack of positive feelings scale on a 7-point likert scale ranging from strongly disagree to strongly agree on items assessing on how individual feels. The item assesses individual's lack of positive feelings (Anderson & Carnagey, 2009). The items are friendly, understanding, amiable, good-natured, cooperative, agreeable, kindly, polite, sympathetic, and tame. Each item was reversed coded meaning higher scores indicate lower positive affect after playing the video game (M = 4.05, SD = 1.19, α = .89) (see Anderson & Carnagey, 2009).

4.1.3. Identification. Identification with character was measured using 2, 7-point semantic differential items ranging from strongly disagree to strongly agree. The items assessed how much participants felt they identified with their character (Aaker et al., 2000). This measure was utilized in order to assess Blacks' and Whites' racial identification with their character. (M = 3.50, SD = 2.11, α = .73).

4.1.4. Perceived Similarity. Perceived similarity (Whittler, 1989) was measured using 5, 7-point, semantic differential items ranging from Not all similar to Very similar (M = 9.69, SD = 4.68, α = .70). The items assessed the degree to which the participants felt that the characters were similar to themselves in lifestyle, cultural background, dress, appearance, and basic values (Whittler, 1989). These items have been used in previous research to assess participant's perceived similarity to their character (Aaker et al., 2000).

5. Results

Hypothesis one was supported there was a significant interaction effect between participant race and condition $F(1, 182) = 4.887$, $p < .05$, $_p^2 = .03$. Black participants who played the video game with the Black main character (M = 4.15, SD = 2.86) reported higher levels of identification with that character than did White participants (M = 3.08, SD = 1.38). The above means were statistically different $F(1, 90) = 5.24$, $p < .05$, $_p^2 = .06$ (see figure 1). Hypothesis two was also supported, as there was a significant interaction effect between condition and participant's ethnicity/race for perceived similarity $F(1,184) = 76.49$, $p < .001$. Black participants who played the video game with the Black main character (*Grand Theft Auto: San Andreas*) reported higher levels of perceived similarity (M = 3.63, SD = 1.32) with that character than did White participants (M = 1.50, SD = .74). Furthermore, White participants who played the video game with the White main character (*Grand Theft Auto: III*) reported higher levels of perceived similarity (M = 2.47, SD = 1.29) with that character than did Black participants (M = 1.71, SD = 1.01).These means were significantly different $F(1, 92) = 9.68$, $p < .05$, $_p^2 = .09$ (see figure 2).

Finally, research question one posed whether or not character race influenced perceptions of positive affect after playing the video game. The results showed that there was a significant interaction effect between participant race and condition $F(1, 176) = 4.94$, $p < .05$. Black participants in the Black main character condition (*Grand Theft Auto: San Andreas*) experienced less positive affect (M = 4.54, SD = 1.31) than White participants (M = 3.78, SD = 1.06) in the same condition. However, there was little difference in the White main character condition between Black participants (M = 3.94, SD = 1.17) and White participants (M = 3.95, SD = 1.06).

6. Discussion

The following study examined the effects that race of character has upon video game play outcomes related to identification, perceived similarity, and positive affect. The results showed support for identification and perceived similarity with an avatar/character based upon race. Black participants reported higher levels of identification with a Black main character (*Grand Theft Auto: San Andreas*) than with a White main character (*Grand Theft Auto: III*). Furthermore, Black participants exhibited greater perceptions of similarity with a Black main character (*Grand Theft Auto: San Andreas*) than with a White main character (*Grand Theft Auto: III*). On the other hand, White participants exhibited higher perceived similarity with a White main character (*Grand Theft Auto: III*) than Black participants who played the same video game. The results suggest that Black participants were more likely to find the Black main character of *Grand Theft Auto: San Andreas* similar to themselves in terms of lifestyles, background, appearance, and dress. White participants also made similar judgments' based upon physical characteristics. In terms of affect, the results showed that Black participants reported lower positive affect after playing *Grand Theft Auto: San Andreas* than White participants in the same condition.

Moreover, the depiction of racial representations within a video game may negatively impact individuals experiencing positive affect of playing that game because of sensitivity to stereotypical representations, especially among Black participants. This study found that Black participants who played *Grand Theft Auto: San Andreas* reported lower positive affect than White participants. It could be that this effect was associated with negative stereotypes of Black culture as being violent and aggressive (see Devine & Elliot, 1995). For Black participants this effect may even be more pronounced because they may resent these negative social labels and characterizations and do not endorse them. Cognitively speaking Black participants could be identifying a stereotype that draws criticism and derision as a common portrayal of their group identity. White participants overall scored the lowest on the lack of positive feelings item for the race-condition. This result seems to suggest that for White participants the racial representations presented in a stereotypical narrative didn't negatively impact positive affect. For White participants they could be identifying with Black culture as being trend setting, allowing them to take on a perspective that is normally prohibited. This is known as cultural voyeurism and is a process by which White audiences seek knowledge about and gratification from Black characters since they may perceive that these characters possess certain characteristics they find desirable (e.g., cool, fashionable, athletic) (Appiah, 2004). Overall, this result may indicate that while games evoke pleasurable experiences, the elicitation of that enjoyment maybe limited when certain contextual cues interact with player characteristics. The importance is that while video games can elicit enjoyable experiences (Raney et al., 2006), the context in which the characters and narratives are presented can hinder that experience and potentially impact stereotype associations.

7. Implications for Identification

As mentioned previously there are two ways at looking at identification, that of similarity identification (Feilitzen & Linne´, 1975) and that of cognitive-emotional identification (Cohen, 2001). In cognitive identification the individual losses their own sense of self and "assumes the identity of the media character" (Williams, 2011, p. 6). On the other hand, similarity identification asks the individual to make assessments related to the similarities in notable characteristics between themselves and the media character. This study did show support for similarity identification based upon a matching of physical characteristics (i.e., race) between character and participant. Although, not a direct test of cognitive identification the results related to affective responses may give us indications if this type of identification may have occurred with players based upon race.

Furthermore, the results also offer evidence of how third-person perspectives in video games can impact identification and similarity. Third-person perspectives include the entire character and are viewed from the participant's view as only a few steps right behind the character (Farrar et al., 2006). Thus, individuals can view their entire character in terms of appearance, dress, gender, and even that characters race or ethnicity. Increased focus could lead individuals to make self- and other-distinctions that may likely influence in-group and out-group distinctions based upon the race of that character or avatar. Firstly, stereotypical associations may be more influenced because individuals can make self and other distinctions when playing a video game in a third-person perspective. This could influence category based distinctions based on race. According to distinctiveness theory individual's ethnicity is a self-concept that may be highly salient for individuals who represent a numeric minority in a given environment (McGuire, McGuire, Child, & Fujioka, 1978). Studies using this distinctiveness theory have demonstrated that media responses vary by race (Beaudoin & Thorson, 2006). In this study, most participants did rate characters/avatars who were of the same race as themselves higher in similarity perceptions than opposite race characters/avatars. Research conducted by Mastro (2003) has found that television portrayals of racial minorities can often prime in-group and out-group distinctions. Much like television, third-person perspective offers views of the entire character. This may make those in-group and out-group distinctions more salient than when playing a first-person perspective video game.

For White participants who played *Grand Theft Auto: San Andreas*, this meant that they were aware that their character was not similar to themselves in terms of appearance. Moreover, since most White individuals do not use race as a characteristic that defines their identity, their levels of identification with characters (regardless of condition) would be lower. For Black participants who played *Grand Theft Auto: San Andreas*, this meant that race of the character did influence both similarity perceptions and levels of identification. This also meant that for Black participants who played *Grand Theft Auto: III* that both similarity perceptions and identification would be lower because ethnic identity is factor for Blacks individuals when evaluating a source (Phinney, 1992). The individual results related to identification, perceived similarity and affective responses are worthwhile, particularly when taken together they provide a more accurate picture of the results. Black participants reported higher levels of identification and perceived similarity with a Black main character in a video game (*Grand Theft Auto: San Andreas*) that focused upon somewhat stereotypical narrative of Black culture (See Leonard, 2006; 2009). This stereotypical narrative then could have influenced Black participant's responses to such media. For instance, lower positive affect experienced after playing such a video game could be an indication of Black players identifying with a character that experiences strife because of social distinctions. In general Black participant's responses could suggest a clear distinction made about the

social strife and biases that Black individuals face in real life circumstances. However, for White participants, since race is not an identifying characteristic, the race of the character did not significantly effect their experiencing positive affect.

8. Limitations & Future Directions

One of the limitations of this research is that participants' levels of prejudice were not measured. Whittler (1989) found that Whites' levels of identification and perceptions of similarity with Black representations were weaker for highly prejudice individuals. Thus, identifying certain levels of prejudice towards minority representations might add to the findings and overall variance of this research. Furthermore, cognitive identification was not directly measured, future research should include this measure along with similarity identification in order to directly test for differences in identification with different racially represented characters. Also, video games are assumed to be a very active medium compared to more passive mediums like television. The question is then would these results be similar or different for individuals watching the video games rather than playing them. This research examined video games impact upon identification with characters from a third-person perceptive, future studies should compare the differences between both third-person and first-person perspectives in gaming. Other directions that need to be considered regard the violent content of these types of video games. Would the findings regarding identification and perceived similarity be the same for individuals playing a non-violent video game compared to a violent video game? Future research should specifically examine differences in levels of identification across both violent and non-violent video games. Overall, this research adds to the growing literature on video games and identification, but more avenues within this area need to be explored.

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Figure 1: Interaction Between Participant Race and Condition for Identification

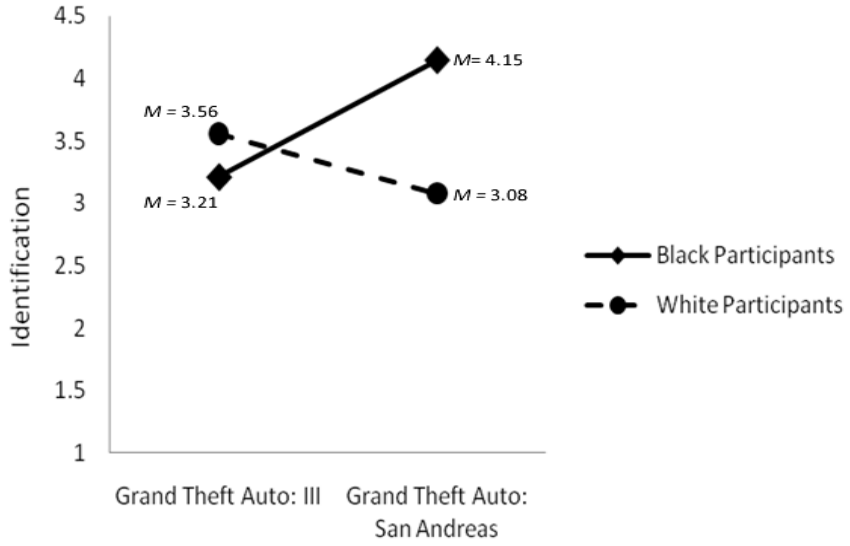
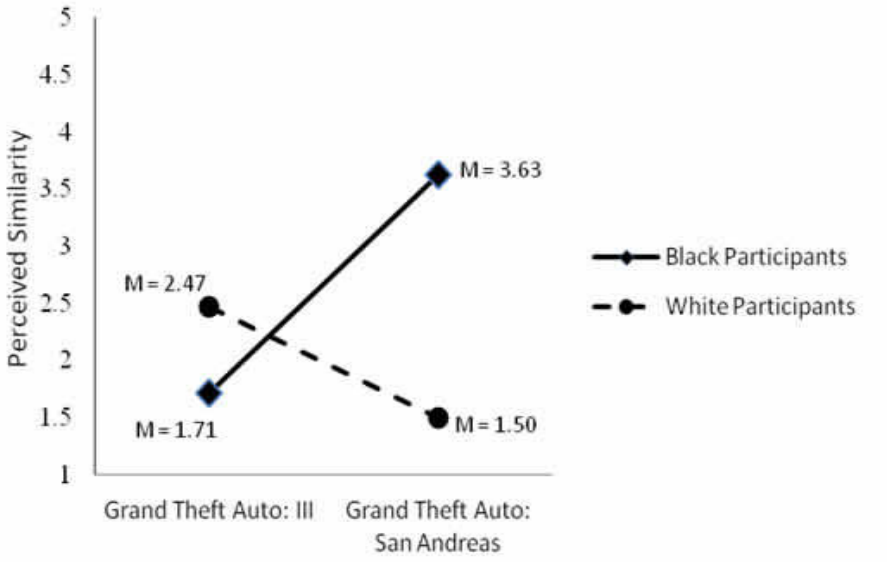


Figure 2: Interaction Between Participant Race and Condition for Perceived Similarity



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