[Accepted Article Manuscript Version (Postprint)] Audience Responses to Diverse Superheroes: The Roles of Gender and Race in Forging Connections with Media Characters in Superhero Franchise Films

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Audience Responses to Diverse Superheroes: The Roles of Gender and Race in Forging
Connections with Media Characters in Superhero Franchise Films

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Abstract

This study took advantage of the recent release of several mainstream, franchise action films featuring diverse casts to investigate how the gender and race of viewers interacts with those of the characters to shape viewers’ sense of connection to the characters. Through an online survey of 147 viewers, it addresses which characters within a film the viewers saw themselves as most connected to, and considers two types of subjective, virtual connections to specific characters - identification and parasocial relationship (PSR). Respondents were more likely to cite characters played by actors of the same gender or the same race as the one to which they felt most connected. Participants reported stronger parasocial relationships with characters played by actors who were women. A viewer-actor match in terms of race was associated with stronger PSR, which was attributable to African American respondents’ engagement with characters from *Black Panther*. Demographic correspondences between the viewers and the actors playing their selected characters were not associated with stronger identification.

Keywords: Identification; Parasocial Relationships; Superheroes; Counter-stereotypes
Audience Responses to Diverse Superheroes: The Roles of Gender and Race in Forging Connections with Media Characters in Superhero Franchise Films

This study took advantage of the recent release of several mainstream, franchise action films featuring diverse casts to investigate how the gender and race of viewers interacts with those of the characters to shape viewers’ sense of connection to the characters. Through an online survey of 147 viewers, it addresses which characters within a film the viewers saw themselves as most connected to, and considers two types of subjective, virtual connections to specific characters - identification and parasocial relationship (PSR). Respondents were more likely to cite characters played by actors of the same gender or the same race as the one to which they felt most connected. Participants reported stronger parasocial relationships with characters played by actors who were women. A viewer-actor match in terms of race was associated with stronger PSR, which was attributable to African American respondents’ engagement with characters from *Black Panther*. Demographic correspondences between the viewers and the actors playing their selected characters were not associated with stronger identification.

**Keywords:** Identification; Parasocial Relationships; Superheroes; Counter-stereotypes

Mainstream media, such as Hollywood films, have been found to consistently under-represent or misrepresent women and members of racial and ethnic minority groups (e.g., Lauzen, 2019; Signorielli, 2009). This has implications for the audience in that patterns of representation can shape real-world expectations and behaviors. For example, if portrayals of members of a particular social group are rare, it can convey or reinforce perceptions that the group lacks importance or status. Furthermore, when members of these groups see few positive role models that are similar to themselves, they can miss out on the positive benefits
that these models can bring. However, there are areas in which the diversity of media representations is increasing. This study explores the implications of this change by examining how audiences respond to diverse characters in mainstream franchise films.

The data about historical patterns of representation is clear. Content analyses have repeatedly found that female characters and characters of color are dramatically underrepresented in entertainment media, and particularly in mainstream media targeted at mass audiences. For example, in a content analysis of the 100 top-grossing films of 2018, Lauzen (2019) found that 31% of the protagonists and 36% of the major characters were female. A content analysis of gender representation in prime-time television (Sink & Mastro, 2017) found that women and girls represented 40% of characters, significantly less than their proportion of the real-world population. Baker and Raney’s (2007) study of superheroes in children's T.V. programming found that only 34% of superhero characters were girls or women. Media representations of characters of color in positive, central roles have also been historically rare (e.g., Mastro, 2009; Signorielli, 2009; 2010). For example, only nine percent of the characters in Baker and Raney’s (2007) study of superheroes in children's programming were of a recognizable race or ethnicity other than White, a proportion that was less than half the proportion of characters whose race/ethnicity could not be distinguished (24%).

However, several recently-released, franchise action films are notable in featuring women and characters of color in prominent, positive roles. Examples of prominent women characters in recent popular films that defy many, although not all, aspects of traditional gender stereotypes include Natasha Romanov/Black Widow of the Marvel Cinematic Universe film series, Rey and Rose Tico of recent Star Wars films, and Diana Prince/Wonder Woman of
D.C. Comics’ series. They are portrayed as intelligent and independent and their actions drive the narrative's plot. There are also a number of prominent counter-stereotypes in recent franchise films in terms of race. Finn, one of the primary characters in *Star Wars: The Force Awakens* and *The Last Jedi*, is played by a Black actor and the actor who portrays Rose Tico in the latter film is Asian American. Perhaps most notably, *Black Panther*, which was a success for Marvel in 2018, featured Black actors in most of the major roles.

A few prominent characters do not mean Hollywood's representation problems are solved. However, these movies offer the opportunity to investigate the implications of greater diversity in media representations for audience responses. These films allow a wider range of audience members to see prominent characters that are similar to themselves in terms of these demographic characteristics. When viewing these films, girls, women, and viewers of color have the opportunity to develop a sense of virtual connection to demographically similar characters in productions whose budget and marketing reach make them widely available and convey a sense of social importance. Furthermore, more diverse casting gives White and male viewers, who have been more frequently represented in mainstream media, opportunities to develop virtual connections with characters that are demographically different from themselves. The goal of this study, therefore, was to see how the characteristics of the audience member and of the character shown on the screen might shape audiences’ connections to the characters. In focusing on superhero franchise films, the study considers a genre that plays a central role in the economics of the entertainment media industry and has the potential to have a substantive influence on the audience. These films are among the most widely seen and heavily marketed, recently competing only with family films in terms of box-office grosses. The top-grossing films in
the U.S. from 2017 to 2019 were superhero franchises and each year at least two of the top five films fell in this category (Box Office Mojo, n.d.). The films are also distributed through other outlets, such as streaming and DVD, and the characters and story-world are tied into other genres such as TV series, comic books, and video games, which further lengthens their reach.

**Identification and Parasocial Relationships**

The current study addresses which characters within a film audiences see themselves as connected to, and considers two types of subjective, virtual connections - identification and parasocial relationships (PSR). Both identification and parasocial relationships have been the subject of much previous research. Although each deals with virtual connections between the audience member and a media character, the concepts are distinguished from each other by the salience of the audience member's sense of self and the time frame in which the connection is active. Identification is a form of perspective-taking that involves experiencing a story from the perspective of a character within the narrative. According to Cohen (2001), identification occurs as media is being processed and involves a merging of the perspectives of the audience and the media character. Furthermore, audience members' sense of self becomes muted as they identify with a character and experience the story from the character's perspective. Parasocial relationship, in contrast, is a sense of virtual relationship. Audience members perceive media characters as if they were someone they know, but do not lose awareness of their own identity. PSR also differs from identification in how long the sense of connection lasts. According to Dibble, Hartmann, and Rosaen (2016), PSR extends beyond the time period when the material is being processed. It “may begin to develop during viewing, but also extends beyond the media exposure situation”
The attributes of both the character and of the audience member shape whether an audience member develops a sense of connection with a particular media character and, if so, how strongly.

**Gender, Race, and Character Connection**

As noted above, the cast of several recent entries into established film franchises have been more diverse in terms of gender and race/ethnicity than was typical in earlier films. This is relevant to a potential antecedent of identification and PSR - similarity between an audience member and character (e.g., Chen, Bell, & Taylor, 2016; Cohen, 2001; De Graaf, 2014; Hoeken, Kollokoff, & Sanders, 2016; Liebers & Scramm, 2017; Tian & Hoffner, 2010). Research findings in this area have been inconsistent, which suggests that the relationship is complex and highlights the need for further investigation.

On one hand, the findings of some studies indicate that differences between an audience member and a character in terms of demographic characteristics - including obvious and socially significant ones such as gender, race, or ethnicity - do not preclude the development of a strong sense of identification between a viewer and a character as they interpret a story. In fact, there may be circumstances in which audiences seek out these sorts of connections. For example, the "Temporarily Expanding the Boundaries of the Self" model developed by Slater, Johnson, Cohen, Comello, and Ewoldsen (2014) suggests a psychological mechanism that would lead audiences to be drawn to characters that are unlike themselves in key ways. Identifying with characters with different experiences is thought to offer a greater opportunity to escape the constraints of one's own self-identity by virtually stepping into the character's perspective, thus offering a greater sense of respite or relaxation.
Other evidence of audience members' abilities to form bonds across demographic differences include experiments such as the one carried out by De Graaf and Hustinx (2011), in which the gender of a character in a written, persuasive narrative was varied across conditions. Participants who were assigned to read a story with a main character that was of their own gender did not rate the character as more similar or report stronger identification than those assigned a version with a character of the opposite gender. Similarly, Cohen, Weimann-Sacks, and Mazor (2017) compared readers' reports of identification with characters from a short story that varied only in terms of the main character’s attributes such as race, nationality, or age. They found that a match between the character and the reader on these attributes made no appreciable difference. Hall's (2019) study of audiences' responses to Star Wars: The Force Awakens asked participants to select the returning and new character they felt "the strongest connection with" and then to evaluate their sense of PSR and identification with that character. In relation to the new characters introduced in the movie, there were no significant differences between participants evaluating a character of the same gender and those evaluating a character of another gender.

On the other hand, survey studies provide evidence that similarities between the audience member and character in terms of factors such as gender, race, or ethnicity can shape which characters an audience member attends to or aspires to be like, particularly in relation to audio-visual media. For example, Hoffner and Buchanan (2005) asked a sample of young adults to indicate how much they desired to be like their favorite male and female television character. They found that participants of both genders reported greater wishful identification for same-gender characters. Hoffner (1996) asked a sample of children to evaluate their level of wishful identification and PSR with their favorite television character.
She found that 91% of the boys and 53% of the girls identified a character of the same gender as their favorite. She also found that girls who were evaluating girl or women characters reported stronger wishful identification and PSR than those evaluating boy or men characters. Furthermore, although Hall (2019) found no difference between the identification and PSR levels reported by participants who evaluated Star Wars characters of the same as opposed to a different gender, gender made a difference in terms of the character they chose to evaluate. Only four percent of the men in the sample selected a woman as the returning character they felt most connected to, whereas 22% of the women in the sample selected a woman character within this category. There was a more even match when participants were asked to choose from among the most prominent new characters in the film, where screen time was more evenly distributed among men and women characters. Thirty-five percent of men in the study selected a woman character whereas 66% of the women in the study did so. However, even in this case, participants were more likely to select same-gender characters than would be expected by chance. 

Relatively little research has been done to determine whether viewers are disproportionately likely to focus on characters of their own race or ethnicity. One reason this research is so sparse may be the historical lack of engaging, non-White characters that are available to audiences in North American and European media. However, qualitative the accounts of audience members of color indicate that the race and ethnicity of characters can matter. For example, Jenny Han, a Korean-American author who wrote a series of young-adult novels featuring an Asian lead characters that were eventually adapted into movies, has written about growing up without seeing female Asian characters in mainstream media: “What would it have meant for me back then to see a girl who looked like
me star in a movie? Not as the sidekick or romantic interest, but as the lead? . . . Everything.” (Han, 2020, para. 8). Furthermore, scholars working from the Critical and Cultural Studies tradition have examined how specific minority audiences interpret the often-problematic representations of demographically similar characters that are available (e.g. Bobo, 2003; Park, Gabbadon, & Chernin, 2006) and found that viewers are often drawn to and enjoy depictions of characters of their own race or ethnicity, even as they work to negotiate interpretations that deemphasize or otherwise moderate the negative, stereotypical aspects. This also suggests that demographically-similar characters may have specific appeal.

This pattern of findings suggests that although audience members can and do form vicarious connections with media characters that are demographically different from themselves, in real-world contexts this might be less common than forming connections with demographically similar characters. A variety of psychological theories, including Social identity Theory and Self Categorization Theory (e.g. Turner, 1991; Turner & Oakes, 1986) suggests that individuals’ sense of self is partially based on their sense of the social groups to which they belong. This suggests that individuals are intrinsically attuned to social categories, which can include socially significant demographic categories such as gender, race, and ethnicity, and that they tend to identify with and take on the characteristics associated with groups to which they belong. When applied to media reception, it suggests that common group memberships between a viewer and character, including demographic commonalities, may function to cue a viewer that a particular character is relevant to them. Viewers would be more likely to attend to and model attributes of characters from similar groups. If this is the case, it suggests there is reason for concern about the lack of diverse representation in the media because women, girls, and viewers of color would suffer from a relative dearth of positive role models and will not
benefit from the positive influence these role models can have.

This concern extends to media like fairy tales and superhero franchises that involve characters with magical or superhuman powers. These characters serve as role models despite the fantastical elements, as is illustrated by research describing how fans of science fiction and fantasy have translated the positive lessons they see in these stories into real-world actions (e.g., Jenkins, 2012), as well as by studies such as those by Isberner et al. (2018), which found that exposure to fairy tales with empowered women characters increased viewers’ sense of self-efficacy. The potential role of a demographic match between a viewer and a character is complicated, but not eliminated, when considering narratives that take place in fantastical settings where a characters’ heritage or gender can be immaterial, unspecified, or fantastical. One could not easily code the ethnicity of characters from the planet Alderaan or the realm of Asgard using categories from a census survey. However, in live-action audio-visual media, characters are most often embodied by actors that audiences can categorize as being of a particular gender or as belonging to a particular racial group. The visible attributes of the actors playing these roles, therefore, is likely to shape perceptions of the character, even if the race, ethnicity, or gender the character within the story is indeterminate or fictional.

In addition, commonalties between a viewer and a character might be more impactful for some audience groups than others. Hall (2019) and Hoffer (1996) found that although all participants tended to select same-gender characters, it was more common for girls and women in the samples to select boy or men characters than vice-versa. One explanation for this pattern has to do with the nature of media portrayals available. Men and White audience members tend to have a larger number of same-gender or same-race characters to choose from, particularly in
prominent, positive roles (e.g., Baker & Raney, 2007; Lauzen, 2018; Signorielli, 2009). Women and non-White audience members, in contrast, might be forced to forge connections with characters that are demographically different to find characters they see as interesting or worthy of aspiration.

There is reason to think, however, that demographic similarities between viewers and characters might be more predictive of a viewer's tendency to notice and attend to characters among some social groups than others, even after accounting for differences in representation patterns. For example, if an audience were to be presented with men and women characters that are equally appealing, viewers of one gender might be more likely to be drawn to, identify with, or develop parasocial relationships with characters of the same gender than would viewers of another gender. Three reasons that effects of demographic similarity on character connection might vary across groups include differences across groups in the relative novelty of positive, prominent portrayals, in the salience of the demographic characteristics in reference to one's self-identity, and in relative status.

Given that female viewers and viewers of color rarely see characters that look like themselves on the screen in prominent, positive roles they may be particularly likely to attend to or orient towards demographically similar characters when they are present. Furthermore, Critical Race Theory suggests that the racial and ethnic characteristics of disempowered or minority groups tend to be more salient and more marked than those of empowered groups. Non-White, non-European races and ethnicities tend to be noted as different in U.S. society while Whiteness tends to be invisible. Whiteness has been socially constructed as the implicit normative standard, in comparison to which everything else is seen as the “other” (e.g. Dyer, 1997; Foster, 2003; Rogers & Mosley, 2006). This shapes
how individuals see themselves. White study participants, for example, often tend to be uncomfortable identifying themselves as part of a racial group (Lewis, 2004; Martin, Krizek, Nakayama, & Bradford, 1996). This pattern suggests that viewers of color would be more likely to attend to demographically similar characters when they are present than would viewers who are White, while White viewers may be free to establish ties based on other attributes.

Finally, different social groups have different status levels. Viewers from groups that tend to have less status and power - women and non-White racial or ethnic groups - might be more likely to attend to characters from higher status groups than vice-versa. In contrast to the other two explanations, this third factor suggests that it is male or White viewers who would be most likely to attend to demographically similar characters.

Based on this previous research and theoretical perspectives, the following hypotheses and research questions were developed.

H1: Participants will be more likely to select characters played by actors of the same gender as the character to which they feel closest than characters of a different gender.

RQ1a: Does the strength of viewers' PSR with a character vary depending on whether the viewer and the actor playing the character are of the same gender?
RQ1b: Does a viewer's gender moderate the impact of a demographic match between the viewer and the actor playing the character on strength of PSR?

RQ2a: Does the strength of viewers' identification with a character vary depending on whether the viewer and the actor playing the character are of the same gender?
RQ2b: Does a viewer's gender moderate the impact of a demographic match between the viewer and the actor playing the character on level of identification?

H2: Participants will be more likely to select characters played by actors of the same race/ethnicity as the character to which they feel closest than a character played by actors an actor of a different race/ethnicity.

RQ3a: Does the strength of viewers' PSR with a character vary depending on whether the viewer and the actor playing the character are of the same race?
RQ3b: Does a viewer's race moderate the impact of a demographic match between the viewer and the actor on strength of PSR?

RQ4a: Does the strength of viewers' identification with a character vary depending on whether the viewer and the actor playing the character are of the same race?
RQ4b: Does a viewer's race moderate the impact of a demographic match between the viewer and the actor playing the character on level of identification?

Method

Participants and Procedures

Since film casting still tends to be relatively homogenous, data were collected in two waves, each designed to correspond with the release of high-profile, franchise films with diverse casts in terms of gender and race/ethnicity. The goal was to increase the likelihood of gathering a sample of participants who had recently had the opportunity to see
diverse characters. After the study’s treatment of human subjects was approved by the researcher’s Institutional Review Board, a convenience sample was recruited from undergraduate communication classes at a Midwestern, urban university in exchange for a modest amount of extra credit.

The first round of data collection took place in December 2017, about a month after the release of Marvel’s *Thor: Ragnarok* and several weeks after the release of *Justice League*, which is part of DC Comics franchise and features multiple superheroes including Batman and Wonder Woman. Prospective participants were sent a link to the survey, where the initial page explained the study and asked for informed consent. Participants were asked if they had seen *Thor: Ragnarok*, which was the more popular of the two releases according to box-office figures (Box Office Mojo, n.d.), and asked to evaluate it if they had. If they had not seen that film, they were asked if they had seen *Justice League*, and instructed to evaluate that film. Those who indicated they had seen neither were told they were not eligible. Forty-seven respondents indicated they had seen one of the two films and completed the survey in this round.

The second round of data collection took place in March 2018, about a month after the release of Marvel’s *Black Panther* and a few months after the release of *The Last Jedi* from the Star Wars series. Participants were first asked if they had seen *Black Panther* and, if not, *Star Wars: The Last Jedi*. In order to expand the range of participants and films, those who reported seeing neither were invited to type in the name of the last superhero or fantasy action film that they had seen all the way through in one sitting. They were then asked to think about this film when they answered the questions that followed. One hundred and twenty-seven participants completed the survey in this wave.
The data of participants in the second round who reported having taken the earlier version of the survey \((n = 12)\) were removed prior to the analyses. Therefore, no one was included in the analysis more than once. Cases of participants who selected their own films in the second round of data collection were eliminated from the analysis if they evaluated a TV series rather than a film \((n = 1)\), did not identify the film \((n = 1)\), or saw the film with commercials \((n = 1)\). In both rounds, cases were eliminated from the analyses if the participant indicated they had not seen the film all the way through \((n = 1)\), or incorrectly completed an attention check measure asking them to confirm their place in the survey by clicking on a specified answer \((n = 11)\).

A total of one hundred and forty-seven participants completed the survey and submitted usable data between the two waves of data collection. Twenty-two \((15\%\) of the total usable sample) nominated their own film in Wave 2. Seven of these respondents \((5\%\) of the total usable sample) spontaneously selected either "Thor: Ragnarok" or "Justice League," which had been released relatively recently and were the focus of Wave 1. Sixty-one percent of the respondents submitting usable data were women and 38\% were men. One respondent skipped the question and none of the participants self-identified as being genderqueer, non-binary, or of another gender. Sixty-seven percent of the participants were White, 23\% were African American, and 2\% were Asian. Five percent either specifically identified themselves as multiracial or selected more than one race. The rest were either of some other race or declined the question. Five percent identified themselves as Hispanic or Latino, one percent declined the question, and the rest indicated they were not part of this ethnic group. The average age was 25.26 \((SD = 7.01)\). The median was 23, indicating that the sample was not distributed normally by age. As one would expect from a college-
based sample, younger adults were over-represented. Seventy-two percent of the participants were between 18 and 25.

*Black Panther* was the film that the most participants reported having seen and answered questions about (*n* = 62; 42%). *Thor: Ragnarok* was evaluated by the second-highest number of participants. Thirty-five participants (24%) saw and evaluated this film, including six participants who nominated the film in Wave 2. Twenty participants (14%) evaluated *The Last Jedi* (14%), and 15 (10%) evaluated *Justice League*, including one Wave 2 participant who nominated the film. The remaining 10% of the participants (*n* = 15) nominated a film in Wave 2 other than *Thor: Ragnarok* or *Justice League*. They reported seeing a range of other titles, most of which were previous entries in the Marvel or DC film series (e.g., *The Avengers, Guardians of the Galaxy, Wonder Woman*) or other franchises (e.g., *Deadpool, Jumanji: Welcome to the Jungle*).

Participants completed questions about where they saw the movie they were evaluating and completed a series of Likert-type questions about their overall enjoyment, which is to be addressed in a separate analysis. Then, participants who had indicated they had seen one of the films that were the focus of the study (*Thor, Justice League, Black Panther, or The Last Jedi*) were asked to identify the character they "felt the strongest connection with" from a list of the four to six characters in the movie with the most prominent roles based on screen time and centrality to the plot. Images of characters were presented with their name to help participants identify them. Participants were presented with an open-ended question asking why they chose this character, which was followed by close-ended questions measuring identification and PSR. Participants in the second round of data collection who had not seen either *Black Panther* or *The Last Jedi*
wrote in the name of their chosen character, and then completed the open ended and close-ended measures about that character. Evaluations of characters that participants chose were followed by prompts to evaluate specific characters of interest, which is to be addressed in a separate analysis. At the end of the survey all participants completed measures of their own demographic characteristics.

**Measures**

**Character Selection.** In order to determine whether there was a match between the gender of the participant and the character they selected, the participants’ self-reported gender was compared to that of the actor playing the character they chose, provided that this could be determined from the film’s portrayal. As noted in Table 1, among these cases ($n = 145$), fifty-four percent selected a character played by a male actor.

In order to determine whether there was a match between the race of the participant and the character they selected, the participants’ self-reported race was compared to that of the actor playing the character, provided that this was apparent in film’s portrayal. Of the participants who selected characters whose actor’s race could be categorized ($n = 145$), 55% selected a character played by a White actor, and 41% selected a character played by a Black actor. Three percent selected a character played by an actor who describes themselves as multiracial. All of these are attributable to Tessa Thompson’s Valkyrie in *Thor*.

The character that was selected most often was T’Challa/Black Panther ($n = 17$), followed by Shuri ($n = 16$), who was also from *Black Panther*. Thor ($n = 14$), was the most commonly selected character from *Thor: Ragnarok*, and Diana/Wonder Woman ($n = 13$), was the most frequently selected character from *Justice League*. Rey ($n = 10$) was the most-
frequently selected character from *The Last Jedi*, and was fifth overall, after Okoye (n = 11) of *Black Panther*. A complete list of the characters selected by the participants and the films in which the character appears is available in Table 1 of the Online Supplemental Materials.

**Parasocial Relationship and Identification.** The two forms of character connection that were investigated in this study, parasocial relationship and identification, were measured with a series of close-ended items from previous research. The wording of all the items is available in Table 2 of the Online Supplemental Materials. To measure strength of parasocial relationship participants were asked to answer 15 items adapted from previous research (e.g., Barriaga, 2011; Hartmann, Stuke, & Daschmann, 2008; Rubin, Perse, & Powell, 1985) by changing the referent to “this character” to make it clear the participants were evaluating the character they previously selected. Participants were asked to indicate how much they agreed or disagreed with statements about how they felt about the character “in general.” Items were selected for inclusion in the questionnaire if they were consistent with conceptualizations of PSR as an ongoing sense of interest in a character that is distinct from identification. The items were also intended to measure platonic interest in the character rather than romantic interest or sexual attraction.

To measure identification with their selected characters, participants were asked to think about the character and complete five items from Tal-Or and Cohen (2010) about "how you felt when watching the movie" on a scale from 1 (strongly disagree) to 7 (strongly agree). Example items include "I tended to understand the reasons why the character did what they did" and "while viewing the movie, I felt the emotions this character portrayed."

Exploratory factor analyses including both the PSR and identification items were
carried out to identify items that distinctively measure the two types of character connection. The analysis found three eigenvalues that were greater than one, with the first factor accounting for 51% of the variance. When the factors were rotated orthogonally, all five of the identification items loaded on the same factor with primary loadings that were greater than .60 and secondary loadings that were less than .40. The pattern matrix of factor loadings is available in Table 2 of the Online Supplemental Materials. Eight PSR items, which seemed to capture general interest in the character, loaded together. Examples included: “I have looked forward to watching this character in new movies” and “I would miss this character if they didn’t appear in future movies.” Two additional items - "this character makes me feel comfortable, as if I am with a friend" and "I see this character as a natural, down-to-earth person" - loaded cleanly on a third factor, while the remaining items cross-loaded. For the analyses, scales were created by averaging the items from each of the first two factors, consisting of the eight PSR items ($M = 5.56$ ($SD = 1.27$); $\alpha = .92$) and five identification items ($M = 5.87$ ($SD = 1.02$); $\alpha = .90$). The third factor, which seemed to capture perceptions of the characters as regular people, was not included given the study's focus on films with superheroes.

Results

Character and Viewer Gender and Character Connection

In order to investigate Hypothesis 1, which predicted that viewers would be more likely to select characters played by actors of the same gender as the character to which they felt closest, a chi-square analysis was carried out to see if the proportion of participants who selected a character of their own gender was different from what would be expected by chance. The chi-square was significant, $\chi^2 (1, 144) = 20.02; p < .001$, $phi = .37$, providing
support for the hypothesis. As noted in Table 2, seventy-seven percent of men and sixty-one percent of women selected characters played by actors of the same gender.

Research Questions 1a and 2a asked whether viewers’ levels PSR and identification, respectively, would vary depending on whether the viewer and the actor were of the same gender, whereas Research Questions 1b and 2b asked whether these relationships would be moderated by the gender of the viewer. To investigate these questions, a pair of ANOVAs was carried out, one for each outcome variable. In each analysis, the independent variables were the participants’ gender and whether the selected character was played by an actor of same gender or of a different one.

In the analysis of strength of PSR, there were no significant main effects for the gender of the participant, $F(1, 139) = .003, p = .95$, nor were there significant overall effects for evaluating a character of the same gender, $F(1, 139) = .05, p = .82$. However, this should be considered in light of a significant interaction, $F(1, 139) = 6.54, p = .01$. In order to better describe the nature of these interactions, the means for PSR among men and women participants who evaluated same and other-gender character are displayed in Figure 1. Both men and women in the sample tended to report higher levels of PSR when they were evaluating characters played by female actors. Male participants reported higher PSR when the character they were evaluating was played by a woman, $M = 5.95$ ($SD = 1.09$), than when the character was played by a man, $M = 5.27$ ($SD = 1.17$). Among women in the sample, the opposite pattern was observed. The average level of PSR was higher when the actor was also a woman, $M = 5.88$ ($SD = 1.14$), than when the actor was a man, $M = 5.31$ ($SD = 1.49$). Overall, participants’ rating characters played by women reported stronger PSR than those rating characters played by men, $t(142) = -2.81, p = .006$. In relation to
question 1b, participant gender was found to moderate the effects of a gender match. However, as discussed in more detail in the discussion, this finding may be more readily attributable to the films’ characters than to the participants’ gender.

In the analysis with identification as an outcome, there were no significant main effects for the gender of the participant, $F(1, 140) = .08, p = .78$, main effects for evaluating a character played by an actor of the same gender, $F(1, 140) = .90, p = .35$, or interaction effects $F(1, 140) = 2.48, p = .12$. The answers to research questions 2a and 2b is no. There were no overall effects of a demographic match and no significant interactions in relation to participant gender.

**Character and Viewer Race and Character Connection**

Hypothesis 2 predicted that participants would be more likely to select characters played by actors of the same race as the character to which they feel closest. Given the small number of participants and selected actors who were of a race other than White or Black/African American, the inferential statistical analysis was limited to participants who identified as being one of these two races and who selected characters played by actors of one of these two races ($n = 125$). There was, however, variation in the character selections of the participants who selected racial identities other than White or Black/African American. Two of the seven participants who identified themselves as multi-racial selected a character played by a White actor and the other five selected a character played by a Black actor. All three of the Asian participants selected a character played by a White actor. One of the three participants who identified themselves as belong to an “other” race selected a character played by a White actor, whereas the other two selected a character played by a Black actor.

The chi-square evaluating whether White and Black/African American participants
selected characters played by actors of their own race more often than would be predicted by chance was significant, $\chi^2(1, 125) = 13.05; p < .001$, $phi = .32$, supporting the hypothesis. As noted in Table 3, sixty-eight percent of White participants and sixty-nine percent of Black or African American participants selected a character played by an actor of the same race as the one to which they felt closest.

Another pair of ANOVAs was carried out to investigate Research Questions 3a and 3b, which asked whether strength of viewers' PSR would vary depending on whether the viewer and the actor are of the same race, and whether the viewer's race might moderate any relationships. There were no overall effects based on the participant’s race, $F(1, 120) = .62$, $p = .43$. However, the overall effect of evaluating a character played by an actor of the same race was significant, $F(1, 120) = 5.76$, $p = .02$, suggesting that the participants’ level of PSR varied depending on whether the participant and actor were of the same race. There was also a significant interaction, $F(1, 120) = 5.45$, $p = .02$. In order to better describe the nature of these interactions, the mean PSR scores broken down by the race of the participant and the actor playing the evaluated character is shown in Figure 2. White participants reported roughly equivalent levels of PSR whether the character they were evaluating was played by a White or Black actor. Among this group, the average level of PSR was $5.44$ ($SD = 1.16$) when the actor was also White and $5.43$ ($SD = 1.45$) when the actor was Black. This difference is non-significant, $t(90) = .07$, $p = .95$. However, among Black/African American participants, PSR levels were higher, $6.30$ ($SD = .81$) when the actor was Black than when the actor was White, $5.00$ ($SD = 1.79$). This difference was significant, $t(30) = -2.85$, $p = .008$, despite the smaller sample size and decrease in statistical power. In answer to Research Question 3b, the participants’ race was found to moderate the impact of a
As discussed in more detail in the discussion section, most of the participants who evaluated a character played by a Black or African American actor evaluated a character from one film, *Black Panther*, which the results suggest was particularly popular among the Black/African American participants. In the second round of data collection, which occurred after this film was released, *all* of the African American participants and 83% of the multi-racial participants who submitted useable data reported having seen it, whereas 46% of the White participants did so. Furthermore, all three of the participants who selected the one prominent White character in *Black Panther* as the character to whom they felt most connected identified themselves as White.

In the analysis with identification as an outcome, there were no significant main effects for evaluating a character played by an actor of the same race, $F(1, 121) = .05, p = .83$. However, there were main effects for the race of the participant, $F(1, 121) = 5.24, p = .02$. Black/African American participants reported stronger identification on average, 6.32 ($SD = .79$) than their White counterparts, 5.72 ($SD = 1.08$). The interaction effects were not significant, $F(1, 121) = 1.14, p = .29$. The answers to research questions 4a and 4b was no, indicating that there not overall effects of a demographic match, nor were there interactions in relation to the race of the participant.

**Discussion**

**Gender and Character Connection**

This study replicated previous research (Hall, 2019; Hoffner, 1996; Hoffner & Buchanan, 2005) in finding that viewers of audio-visual media are disproportionately likely to identify a connection between themselves and media characters that are portrayed as
being of the same gender. Although, as discussed below, demographic differences on this factor do not preclude a strong sense of connection between a viewer and a character, this is additional evidence that a character’s gender is meaningful in terms of determining which of the characters featured in a film or TV series a specific viewer is likely to focus on or feel an affinity with.

Furthermore, as has also been found in previous research, women in the sample were more likely to select a character of a different gender than their male counterparts. Thirty-nine percent of the women in the sample did so, compared to 23% of the men. Part of this might be due to the range and nature of the characters available to choose from. Each of the four films that were the focus of the study had at least one prominent, active, and positively-portrayed woman. However, two films had only one of these characters. The Last Jedi and Black Panther had multiple positive female leads. Valkyrie was the only heroine in Thor: Ragnarok, and Wonder Woman was the only heroine in Justice League. Overall, men were still more plentiful than women in primary roles, even within this carefully-selected group of films.

Participants did not identify more strongly with characters played by actors of the same gender. However, an actor’s gender was found to predict participants’ general level of interest, or PSR, in a character. Both men and women in the sample tended to report stronger PSR when they were evaluating characters played by women. This finding may be specific to the films under investigation. It is possible that the women in many of these films were particularly engaging relative to the men, and drew interest from viewers of both genders. As noted in the results section, $t$-tests indicated that the participants reported higher average levels of PSR when considering women characters than men characters. Among characters who were evaluated by more than one participant, the five characters with the
highest average PSR scores were all women. In order, these characters were Shuri (*Black Panther*), Nakia (*Black Panther*), Okoye (*Black Panther*), Valkyrie (*Thor: Ragnarok*), and Rey (*The Last Jedi*).

**Race and Character Connection**

This study also expanded on previous research in examining race as a potential contributor to viewers' perceptions that they are connected to a character. Participants were disproportionately likely to identify a connection between themselves and media characters when they were played by an actor of the same race. In the current study, White and African American participants were almost equally likely to select a character of the same race. Furthermore, congruity on this attribute was found to be associated with stronger reports of PSR. The relationship was largely attributable to Black and African American participants, who reported significantly higher levels of character connection when evaluating a character played by a Black actor than a character played by a White one.

This finding should be contextualized by the knowledge that all of the characters played by Black actors that were selected by Black or African American participants came from one film - *Black Panther*. The character of Black Panther was one of the first Black characters to be featured in comics released by the major publishers and was first seen in 1966 (Sanderson, 2020). Although there had been characters of color featured in the Marvel Cinematic Universe series of films that *Black Panther* is a part of, this was the first film in the series to center specifically on a Black superhero. Other characters, such as Falcon/Sam Wilson or War Machine/Rhodey Rhodes were secondary characters. Furthermore, this 2018 release is notable for being the first big-budget, franchise action movie to have a majority Black cast. The director, screenwriter, and
many of other professionals in key roles behind the camera were also people of color. Unusually for superhero films, the race and ethnicity of the characters is a prominent and salient part of the plot. Although the Wakanda setting is fictional, it is explicitly placed in Africa and prominent themes relate to the African diaspora. The movie was significant as a social, cultural, and economic milestone and, as noted in the results section, all of the African American participants who completed the survey in Wave 2, after it had been released, reported having seen it whereas less than half of the White participants in this wave of the survey did so. This suggests that part of the selection pattern was happening at the level of the film. Black/African Americans within the sample were found to select Black characters as the ones they felt most connected to, in part, because they had chosen to attend a movie that featured an array of appealing and accomplished Black characters. Social Identity Theory suggests opportunity to highlight shared group membership in a context where race was salient social category and the representation was extremely positive may have offered a particularly powerful opportunity to increase self-esteem. It is possible that the Black and African American participants reported particularly high levels of PSR with characters played by Black actors because of the themes and social significance of the film.

Limitations

The high proportion of Black and multi-racial participants who had seen Black Panther highlights a limitation of the study, which is that the extent to which the findings would hold with a different sample of movies is unclear. This suggests a need for further research to determine the generalizability of the findings. This would require mainstream entertainment featuring an array of characters of color rather than single
token characters to become more common. However, the response to Black Panther, as documented here and in the box office returns, speaks to the significance of these positive and engaged portrayals when they are available. The current analysis also focused exclusively on White and African American/Black participants who evaluated a character played by a White or Black actor. Although there were participants in the sample as well as actors featured in the films who identified as Asian or as multi-racial, the numbers were not large enough to provide the statistical power to carry out analyses regarding these groups. Future research should seek to include not only a wider range of social groups, but also to explore the intersectionality that characterizes many people’s experience. That is, it would be worthwhile to explore how audience members who identify with multiple races and ethnicities respond to media, and how these racial and ethnic identities might interact with those relating to other factors such as gender, sexual orientation, or nationality.

Another limitation of the study is that it relied upon the participants’ retrospective accounts of their sense of identification while watching the films. Most of the participants were completing the measures within weeks of seeing the films. However, the participants’ memory of the intensity of these feelings is no doubt imperfect and it would be ideal if future research could question participants immediately after seeing film.

The study focused on superhero action and science fiction movies featuring characters with unrealistic superpowers in fantastical settings. This genre includes non-human characters generated through puppets or digital effects, such as Guardians of the Galaxy’s Groot or The Last Jedi’s BB-8, where the characters are not human. Although these
kinds of characters can be linguistically gendered through the use of male or female pronouns, gender is not always visually marked, nor are race or ethnicity. There are also alien and mutant characters where the race and ethnicity of the actors who play them are not apparent on the screen. Examples include Guardians’ Gamora and Drax, played by Zoe Saldana and Dave Bautista, respectively. The costuming, make-up, and digital and practical prosthetics that are used in the character designs obscure many of the cues that audiences use to attribute the race and ethnicity of the actors. In the current study, however, there was only one case in which the actor playing a nominated character – Groot – was not clearly presented on the screen and it was excluded from the analysis. Future research should consider how audiences respond characters where many of the visual cues regarding gender or race/ethnicity do not apply. It would also be worthwhile to examine how gender, race, and ethnicity might be implicitly coded and read by audiences in these circumstances. Furthermore, the film industry has a long history of making up White actors to play Black or Asian characters, and continues to “white wash” roles by casting White actors when the source material specifies the character is of a different race or ethnicity. The approach used in this study is not appropriate for all films or all characters.

Another trend that is also worthy of investigation is extending or rebooting existing stories so that established superhero identities are embodied by characters of a different gender, race or ethnicity. Comics, in particular, are notable for presenting multiple versions of many well-established superheroes, often through plots involving superhero identities being taken up by new characters or through stories of parallel worlds with alternate versions of characters. Rebooting a series by simply starting a character’s origin story over is also not uncommon. There are an increasing number of examples in which established superheroes that were originally presented as White and male are reimagined as female or as a person of color. A Black, Latino
Spider-man, Miles Morales, was introduced in 2011, for example. These characters are becoming more prominent as they move off the page onto screens in television and movie versions of the stories. In 2019 Marvel released a film featuring a female Captain Marvel and it is implied that Sam Wilson/Falcon, will take over the title of Captain American in future entries of the Marvel Cinematic Universe. Miles Morales was the center of a recent animated, feature film version of Spider-man. One interesting area of further study would be to see how audiences respond when familiar superhero identities are embodied by female characters or characters of color.

**General Discussion**

Overall, however, the results speak to the power of fiction. There were not significant differences in levels of identification between participants evaluating characters of the same versus a different gender, or between participants evaluating characters of the same versus a different race. This form of character connection is specific to the time frame in which one is reading or watching a narrative, and is thought to be shaped, in part, by how a story is told. It has been experimentally manipulated in written stories, for example, by changing the first-person perspective through which a narrative is told (e.g., de Graaf, Hoeken, Sanders, & Beentjies, 2012). Narrative theorists (e.g., Booth, 1961; Chatman, 1990) argue that an audience member's perspective in narratives of any medium can be shaped by filtering the information presented to the audience through a particular character's perspective. These findings suggest that demographic differences between an audience member and a character are not a barrier to identification with a character and thus do not preclude the positive effects associated with engagement with fiction, including respite and empathy (Oatley, 1999; Slater et al., 2014). Furthermore, both men and women were drawn to the female
characters within this sample. Although they were played by attractive actors, the most popular of these characters such as Shuri, Valkyrie, and Rey, were not highly objectified or presented in a sexualized way. This challenges assumptions on the part of producers that boys and men will not watch films with girl or women protagonists (Lemish, 2010; Smith, Granados, Choueiti, Erickson, & Noyes, 2011) or be unable to see women characters as anything other than subjects of romantic or sexual interest, and provides additional evidence that films with non-sexualized, well-crafted, female lead characters can be financially successful.

Despite the lack of findings in relation to identification, African American participants reported a stronger sense of parasocial relationship with Black characters. PSR relates to an interest or sense of engagement that goes beyond the story. It may be more directly affected by salient demographic similarities, particularly when members of the common group are portrayed positively and provide an opportunity to enhance self-esteem.

The study results also indicate that there is reason to think that it is meaningful to have diverse casts even in stories that are set in mythical or fictional realms. The findings that participants were more likely to attend to characters of the same race and ethnicity suggests that these characteristics may function to cue audience members that the character is relevant to them. Furthermore, even when the character is alien or from a fantastical world, the fact that these highly visible, heroic, and dynamic characters are embodied on the screen by women and actors of color has the potential to convey to viewers something about the more mundane world outside the movie theatre. A more diverse range of superheroes will not, on its own, save the world. However, they can be powerful metaphors and signifiers. The time and money invested in them by both the media industry and audiences speaks to their social significance and ability to
convey a certain type of prestige. Seeing heroic women characters and characters from historically under-represented racial and ethnic groups can convey social importance and acceptance, not only to viewers who share membership in these groups, but to others. Furthermore, they can serve as role models for audience members who have their own, metaphorical, monsters to face and battles to fight. Participants in the study had the option to provide open-ended comments to explain why they selected a particular character. The responses of one of the female participants perhaps best illustrates this point. She selected Wonder Woman, the only woman in the Justice League of the film, as the character to whom she felt the closest connection. "She was a strong female lead that didn't need men's help, but instead, helped them accomplish their goals. As a woman in the STEM field, it is good to see another woman in a male dominated field ... even if it is make believe."
References


Table 1

Frequencies and Percentages of Nominal Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected Character Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man</td>
<td>78</td>
<td>54%</td>
</tr>
<tr>
<td>Woman</td>
<td>67</td>
<td>46%</td>
</tr>
<tr>
<td>Match between the Gender of the Participant and Selected Character</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Character of the Same Gender Selected</td>
<td>97</td>
<td>67%</td>
</tr>
<tr>
<td>Character of Another Gender Selected</td>
<td>47</td>
<td>33%</td>
</tr>
<tr>
<td>Race of Selected Character</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>80</td>
<td>55%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>60</td>
<td>41%</td>
</tr>
<tr>
<td>Multi-Racial</td>
<td>5</td>
<td>3%</td>
</tr>
<tr>
<td>Match between the Race of the Participant and Selected Character*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Character of the Same Race Selected</td>
<td>85</td>
<td>68%</td>
</tr>
<tr>
<td>Character of a Different Race Selected</td>
<td>40</td>
<td>32%</td>
</tr>
</tbody>
</table>

*Note: Includes only participants who identified themselves as White or African American, given the small number of participants and nominated characters within the sample of other races or ethnicities.
Table 2
Frequencies and Percentages of Participants Selecting Characters Played by Male and Female Actors by Participant Gender

<table>
<thead>
<tr>
<th></th>
<th>Male Participants</th>
<th>Female Participants</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Actors</td>
<td>43 (77%)</td>
<td>34 (39%)</td>
<td>77 (53.5%)</td>
</tr>
<tr>
<td>Female Actors</td>
<td>13 (23%)</td>
<td>54 (61%)</td>
<td>67 (46.5%)</td>
</tr>
<tr>
<td>Overall</td>
<td>56</td>
<td>88</td>
<td>144</td>
</tr>
</tbody>
</table>

$\chi^2 (1, 144) = 20.02; p < .001; phi = .37$

Table 3
Frequencies and Percentages of Participants Selecting Characters Played by White and Black/African American Actors by Participant Race

<table>
<thead>
<tr>
<th></th>
<th>White Participants</th>
<th>Black/African American Participants</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Actor</td>
<td>63 (68%)</td>
<td>10 (31%)</td>
<td>73 (58%)</td>
</tr>
<tr>
<td>Black/African American Actor</td>
<td>30 (32%)</td>
<td>22 (69%)</td>
<td>52 (42%)</td>
</tr>
<tr>
<td>Overall</td>
<td>93</td>
<td>32</td>
<td>125</td>
</tr>
</tbody>
</table>

$\chi^2 (1, 125) = 13.05; p < .001; phi = .32$
Figure 1. Average level of parasocial relationship by participant gender and the gender of the actor.
Figure 2. Average level of parasocial relationship by participant race and the race of the actor.