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Racial microaggressions and perceptions of Internet memes

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ABSTRACT

Although more blatant forms of discrimination have declined, racial prejudice continues to manifest itself in subtle ways. For example, People of Color experience racial microaggressions (i.e., subtle slights or 'put downs') in their face-to-face interactions (Nadal, 2011) and in online contexts (Clark et al., 2011). This study investigates whether experiencing subtle racial discrimination offline can influence perceptions of online content, specifically racial themed Internet memes. Results indicate that although both People of Color and Whites viewed racial themed memes to be more offensive than non-racial themed memes (control images), for People of Color the ratings of racial themed memes were predicted by previous discrimination; those who reported experiencing more racial microaggressions in everyday settings rated racial themed memes as more offensive. The same pattern of results did not emerge for ratings of non-racial themed memes or for White participants. These results provide initial evidence that experiencing racial microaggressions in offline interactions may lead individuals from racial minority groups to be more likely to perceive racial discrimination in online settings.

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1. Introduction

Despite original projections that the Internet would provide a safe space for individuals belonging to marginalized groups, racial prejudice and discrimination persists online (see Daniels, 2012; for a review). In the United States, it is estimated that 51% of African American and 54% of Hispanic Internet users have experienced harassment online, as compared to 34% of White Internet users (Pew Research Center, 2014). Internet memes are a popular and pervasive phenomenon (Bauckhage, Kersting, & Hadiji, 2013) that may contribute to the climate of racial discrimination that can exist in online communities (Dyer-Barr, 2010; Tynes, Giang, Williams, & Thompson, 2008; Tynes & Markoe, 2010). Internet memes are individual bits of cultural information, such as an image with a caption, that are widely shared electronically (Guadagno, Rempala, Murphy, & Okdie, 2013). Although Internet memes are often intended to be humorous social commentaries (Davison, 2012; Knobel & Lankshear, 2007), they can be racist in nature (Davison, 2012; Milner, 2013). Despite their prevalence, little is known

about the factors that may influence the interpretation of Internet memes. In an attempt to fill this gap and to better understand perceptions of racial discrimination in online settings, the current study examines how individual differences in experiencing racial discrimination offline (in face-to-face interactions) can impact perceptions of racial themed Internet memes.

1.1. Racial discrimination

Racial discrimination occurs when someone is treated unfairly or less favourably than another person because of their race or ethnicity. Although these beliefs can be expressed blatantly and overtly, because Western societies have prevalent social norms that value egalitarianism, prejudice and discrimination are frequently manifested in more subtle ways (Dovidio, 2001; Dovidio, Gaertner, Kawakami, & Hodson, 2002; Sue et al., 2007). Despite explicitly endorsing equality and reporting positive racial attitudes toward People of Color, Whites still discriminate on the basis of race/ethnicity, particularly when their behaviour can be justified along a dimension unrelated to race (see Dovidio et al., 2002; Pearson, Dovidio, & Gaertner, 2009; for reviews). For example, White participants in the United Kingdom asked to make criminal sentencing decisions were more likely to take into consideration inadmissible

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evidence when presented with a Black (vs. White) defendant, nominating increased ratings of guilt and longer sentences, regardless of their explicit racial attitudes (Hodson, Hooper, Dovidio, & Gaertner, 2005). Illustrating how subtle biases may influence decision making, when presented with ambiguous information where judgments were justifiable along a dimension other than race—such as inadmissible evidence—White participants discriminated against Blacks. Although prejudice may be expressed in more indirect and unintentional ways, targets of discrimination can be aware of these subtle biases and affected by them (Dovidio et al., 2002). Regardless of whether discrimination is blatantly or subtly expressed, being on the receiving end can have negative consequences; in the UK perceived racism is related to poorer mental (Chakraborty, McKenzie, Hajat, & Stansfeld, 2010; Weich et al., 2004) and physical (Karlsen & Nazroo, 2002) health (see Paradies et al., 2015; Pascoe & Smart Richman, 2009; for reviews).

1.1.1. Racial microaggressions

More recently, the term racial microaggressions has been used to refer to the subtle and brief verbal, behavioural, and environmental indignities that People of Color face in their daily lives (Nadal, 2011; Sue et al., 2007). It is important to note that the expression of racial microaggressions is not limited to face-to-face interactions but can occur through environmental cues, such as People of Color being negatively portrayed in the media or underrepresented in positions of power within society (Sue et al., 2007). Thus racial themed Internet memes, such as stereotypical images posted on Facebook, can be categorized as one form of environmental racial microaggressions (Clark, Spanierman, Reed, Soble, & Cabana, 2011; Tynes, Rose, & Markoe, 2013). As an illustration, one racial themed Internet meme that went viral in 2010 (see Gomstyn, 2010) depicted an image of a Black doll priced at nearly half the cost as a comparable White doll. Another popular meme topic pairs individuals from racial minority groups (e.g., a Black person) with food that is stereotypically associated with their race/culture (e.g., a piece of fried chicken). Since memes are intended to be humorous (Davison, 2012; Knobel & Lankshear, 2007), they can be justified along a dimension other than race (i.e., it was only a “joke”) and therefore they may not be considered by creators and/or promulgators as depicting racial discrimination (Apel, 2009; Dovidio, 2001; Dovidio et al., 2002). The cumulative effect of racial microaggressions, regardless of their form, is to disregard the lived experiences of People of Color (Sue et al., 2007). Because racial microaggressions are often ambiguous and subtle in nature, these transgressions can go undetected by perpetrators (Sue et al., 2007; Zou & Dickter, 2014).

Conversely, individuals on the receiving end can be aware of the discrimination perpetrated through racial microaggressions, however it may be difficult to attribute causality due to the ambiguous nature of the transgression (Nadal, 2011; Sue et al., 2007). Although, to date, empirical studies have not been conducted in the United Kingdom, previous research has demonstrated that racial microaggressions are prevalent within the United States (see Wong, Derthick, David, Saw, & Okazaki, 2013; for a review). Within a sample of 152 Asian Americans, 78% reported experiencing some form of racial microaggression within a two-week period (Ong, Burrow, Ja, Fuller-Rowell, & Sue, 2013). Similarly, in a sample of 187 Black women in America, 96% reported experiencing racial microaggressions at least a few times in the past year (Donovan, Galban, Grace, Bennett, & Felicié, 2012). Experiencing this subtle discrimination can be detrimental to one's health. On days when they experienced more microaggressions, Asian Americans were more likely to report stronger negative affect and somatic symptoms (Ong et al., 2013). More generally, the cumulative experience of racial microaggressions is related to reduced positive affect, and

increased depressive and somatic symptoms (Donovan et al., 2012; Huyng, 2012; Nadal, Griffin, Wong, Hamit, & Rasmus, 2014). Thus, like more blatant forms of discrimination (see Pascoe & Smart Richman, 2009; for a review), experiencing racial microaggressions can be detrimental to one's mental and physical health both immediately within the same 24h period and cumulatively over time (see Wong et al., 2013; for a review).

1.2. Online racial discrimination

Racial discrimination can also be experienced in online contexts, across a variety of domains including gaming, fandom, news and sport threads and commentaries, social networking sites, and blogs (see Daniels, 2012; for a review). Despite the decrease in expressions of blatant prejudice in face-to-face interactions (Dovidio et al., 2002; Nadal, 2011; Sue et al., 2007), due to the anonymity offered by the internet which may reduce conformity to the social norm of egalitarianism (Evans, Garcia, Garcia, & Baron, 2003; Hewson, Laurent, & Vogel, 1996), some users post overtly racist content online. For example, comments to race-related YouTube videos expressed overt racism in the form of openly negative affect and obscenities toward racial outgroups and People of Color (August & Liu, 2015). Racist comments are also made when responding to online content that is unrelated to race. In March 2016, Microsoft released an Artificial Intelligence chat bot on Twitter. Tay.ai was designed to engage in conversation and learn from her chats (twitter posts) with humans. Unfortunately, Tay's twitter account was deactivated within 24 h because users interacting with Tay posted racist comments on her feed, which she would re-tweet, often embellished by her own racist commentary (Perez, 2016). Further, overt racism online may be explicitly directed toward People of Color. In another set of race-related YouTube clips, comments posted by self-identified People of Color, as compared comments posted by individuals who did not disclose their racial identity, were more likely to be targeted by overtly racist responses from other users (Kettrey & Laster, 2014). Even when organizations use gatekeeper strategies to reduce offensive posts, such as not allowing anonymous comments or pre-screening/removing offensive content, racialized comments continue to be posted online (Hughes & Daniels, 2013).

People of Color may also experience subtle discrimination online. In an analysis of 10 weblogs (e.g., social network sites, news blogs, personal blogs, etc.), Clark and his colleagues identified comments related to a racialized Native Indian mascot as being racial microaggressions (i.e., microinsults, microassaults, and microinvalidations; Sue et al., 2007) that targeted Native Indians (Clark et al., 2011; see also; Steinfeldt et al., 2010). Further, individuals may be exposed to racialized images such as memes on social networking sites and websites (Tynes & Markoe, 2010), which is another way racial discrimination may be subtly manifested online (Dyer-Barr, 2010; Tynes et al., 2008). As with face-to-face discrimination, research has demonstrated that People of Color experience more online racial discrimination as compared to their White counterparts (Pew Research Center, 2014; Tynes et al., 2013). Further, exposure to both direct and vicarious online racial discrimination can have negative consequences for one's mental health, including increased depressive symptoms (Tynes et al., 2008; Umana-Taylor, Tynes, Toomey, Williams, & Mitchell, 2015), anxiety (Tynes, Umana-Taylor, Rose, Lin, & Anderson, 2012), and feelings of anger and shame (Lee-Won, Lee, Hyunjin, & Borghetti, 2015).

Although previous research has examined the incidence and consequences of online racial discrimination, the majority of studies have used either qualitative observational designs to examine the extent to which users post discriminatory content in

weblogs or comments (e.g., August & Liu, 2015; Clark et al., 2011; Kettrey & Laster, 2014) or correlational designs to examine the relationship(s) between experiencing discrimination online and health-related outcomes (e.g., Lee-Won et al., 2015; Tynes et al., 2008, 2012; Umana-Taylor et al., 2015). Despite the existence of racially discriminatory material online (Daniels, 2012), to date few studies have directly examined how Whites and People of Color interpret and respond to such discrimination. Thus the goal of the current study is to address the gap in the literature by utilizing an experimental design to investigate how perceptions of racial themed and non-racial themed Internet memes might be predicted by previous experience of racial discrimination in face-to-face interactions. In this study we include the responses of both Whites and People of Color, as individuals from both groups can experience racial microaggressions (Nadal et al., 2014). We were interested in whether there are racial group differences in these experiences and in the reactions to Internet memes.

To the best of our knowledge, only a single published study has examined individuals' direct responses to racial themed images presented in an online context. Tynes and Markoe (2010) asked African American and White students to respond to images of racial themed parties (e.g., a "gangsta party" where individuals were dressed in blackface) as if they were writing on their friends' Facebook or MySpace profiles (walls). Participants were also asked to provide three words that described their initial reaction to the images. Similar to racial themed Internet memes, the posting of such party images represents an indirect way to disparage racial minorities (Tynes & Markoe, 2010) and would fall under the domain of environmental racial microaggressions (Dyer-Barr, 2010). Participants' responses provided in both the "wall" posts and the three word reactions to the images were coded by the researchers and individuals were categorized into one of four groups: *not bothered*, *not bothered-ambivalent*, *bothered-ambivalent*, and *bothered*. Participants in the not bothered group were more likely to condone online discrimination and affirm individuals who posted the images, whereas participants in the bothered group were more likely to be vocal in their opposition of the images and "defriend" individuals who posted racist content online. There were important racial group differences in perceptions of the racial themed images; 13% of Whites and 2% of African Americans were in the not bothered group, whereas 21% of Whites and 58% of African Americans were in the bothered group (Tynes & Markoe, 2010). This research provides the first evidence that People of Color may perceive racially-charged material presented in online formats to be more offensive than their White counterparts.

One potential explanation for the observed racial group differences in participants' responses to racial themed party images is that People of Color may be more sensitive to racial microaggressions as compared to Whites. As mentioned previously, due to their subtle nature, perpetrators may be unaware of racial microaggressions (Dovidio et al., 2002; Nelson, Adams, & Salter, 2013; Sue et al., 2007). For example, Whites report more difficulty in determining the offensiveness of an ambiguous prejudicial comment as compared to a more overt instance of racial discrimination (Zou & Dickter, 2014). However, People of Color are aware of racial microaggressions; they report experiencing this subtle discrimination frequently across a wide variety of domains (see Wong et al., 2013; for a review) to a greater extent than their White counterparts (Nadal et al., 2014). Due to previous personal experience with racial microaggressions, People of Color may become more sensitive to signs of racial bias and readily attribute these actions to racism (Dovidio et al., 2002). Thus, it is possible that the more an individual experiences racial microaggressions, the more likely they are to become vigilant and attuned to racial

transgressions in their environment (Dovidio et al., 2002; Major & O'Brien, 2005). In line with this possibility, in the current study we investigated whether past experiences of racial microaggressions would lead an individual to become more vigilant toward future transgressions, and thus rate racial themed Internet memes as more offensive.

1.3. Current study

Given the dearth of research in individuals' perceptions of discriminatory images posted online, the primary goal of this research was to examine the relationship between racial discrimination experienced offline and perceptions of racially biased Internet memes. We asked White and racially diverse participants to self-report their experience of racial microaggressions and rate the offensiveness of racial themed and non-racial themed (control images) Internet memes. As the first empirical investigation conducted in the United Kingdom, replicating previous research from the United States (Nadal et al., 2014), we anticipate that People of Color will report experiencing more racial microaggressions than White participants. We also expect all participants to perceive racial themed Internet memes as more offensive than non-racial themed memes (Tynes & Markoe, 2010). As a result of the potential relationship between previous experiences of racial microaggressions and vigilance to discrimination (Dovidio et al., 2002; Major & O'Brien, 2005), we anticipate a correspondence between racial microaggressions and ratings of the Internet memes, particularly for People of Color, who are more likely to experience racial microaggression in majority White contexts (Nadal et al., 2014; Sue, Capodilupo, & Holder, 2008; Sue, Capodilupo, Nadal, & Torino, 2008). Specifically, we expect People of Color who experience more racial microaggressions to perceive racial themed memes as more offensive. Given that Whites do not experience racial microaggressions to the same extent as People of Color (Nadal et al., 2014), we do not expect this relationship to emerge for our White participants. These findings will provide insight into how exposure to discrimination during offline interactions can shape perceptions of discrimination in online communication; information that is critical to our understanding of how individual differences can predict experiences online.

2. Method

2.1. Participants and procedure

One hundred and thirteen undergraduate students (98 females, 15 males) aged 18–48 years ($M_{age} = 20.39$, $SD = 5.74$) were recruited for participation in this study. Ninety-six participants (85.0% of the sample) were recruited from the undergraduate research participant pool at a University located in Northern England and completed the study in exchange for partial course credit. These participants accessed a link to an online Qualtrics survey that was posted on their course website. In addition, 17 participants (15.0% of the sample) were recruited from cultural societies at two Universities located in the same city in Northern England and completed the study in exchange for entry into a draw to win a £10 high street gift voucher. These students were emailed a link to the same online Qualtrics survey that was forwarded by an executive member from each of the Societies. Participants self-identified as White (68.1%), Black (14.2%), Multiracial (10.6%), or East/South Asian (7.1%). The racial/ethnic breakdown of the participants was similar to the racial/ethnic composition of University campuses in the United Kingdom where Black Minority and Ethnic individuals contribute to 22.8% of the student population (Higher Education Statistics Agency, 2016). We categorized our

participants into two groups for our comparisons: Whites ($n = 77$) or People of Color ($n = 36$).¹

After clicking on the Qualtrics link, as part of a larger study, all participants first provided informed consent. Following this, participants completed the Racial and Ethnic Microaggressions scale and rated the Internet memes. At the conclusion of the study, participants were thanked and debriefed. In total, the questionnaire took 30 min to complete.

2.2. Materials

2.2.1. Racial microaggressions

The Racial and Ethnic Microaggressions scale (REMS; Nadal, 2011) was modified to be relevant for participants in the United Kingdom by changing all reference of “US” to “UK.” In total, 45-items were used to assess six racial microaggressions components including: *Assumptions of Inferiority* (8 items, $\alpha = 0.94$; e.g., “Someone assumed that I would not be intelligent because of my race”), *Second-Class Citizen and Assumptions of Criminality* (7 items, $\alpha = 0.93$; e.g., “Someone avoided walking near me on the street because of my race”), *Microinvalidations* (9 items, $\alpha = 0.89$; e.g., “I was told that people of color do not experience racism anymore”), *Exoticization/Assumptions of Similarity* (9 items, $\alpha = 0.86$; e.g., “Someone did not believe me when I told them I was born in the UK”), *Environmental Microaggressions* (7 items, $\alpha = 0.97$; e.g., “I observed people of my race in prominent positions at my workplace or school”), and *Workplace and School Microaggressions* (5 items, $\alpha = 0.96$; e.g., “My opinion was overlooked in a group discussion because of my race”).

Participants were instructed to identify the number of times a microaggression occurred within the past 6 months using the following response options: 1 (“I did not experience this event in the past six months”), 2 (“I experienced this event 1–3 times in the past six months”), 3 (“I experienced this event 4–6 times in the past six months”), 4 (“I experienced this event 7–9 times in the past six months”), and 5 (“I experienced this event 10 or more times in the past six months”). Responses on the environmental microaggressions subscale were reverse coded. For each subscale higher values indicate that a participant experienced more racial microaggressions.

2.2.2. Racial themed Internet memes

Meme images were obtained from an online google image search using keywords such as “subtle racism” or “accidental racism.” From these searches, we identified five images that depicted notable racial bias with Blacks as the target of discrimination. For example, these *racial themed memes* illustrated racial stereotypes (a cartoon of a Black person eating fried chicken) or racial inequality (a Black doll priced less than a comparable White doll, see Fig. 1). Images were downloaded from websites obtained through the google image search results. Given that all images were found online, we consider our stimuli to be Internet memes (see Guadagno et al., 2013). Because People of Color report experiencing online racial discrimination to a greater extent than their White

counterparts (Pew Research Center, 2014; Tynes et al., 2013), we were primarily interested in comparing perceptions of biased memes where a racial minority was the target of discrimination to perceptions of non-biased memes. For this reason, the racial themed meme images were edited to create a non-biased control images (non-racial themed meme; e.g., a cartoon of a White person eating fried chicken; a Black and White doll priced for the same amount).

To assess perceptions of the memes, participants were presented with a single image and asked to rate how comfortable (reverse scored), acceptable (reverse scored), offensive, hurtful, and annoying the image was on a 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). In total, participants rated 10 images (five racial themed and five non-racial themed control memes) that were presented in random order. Responses were averaged to create two scores; one for the racial themed memes ($\alpha = 0.92$) and one for the non-racial themed memes ($\alpha = 0.91$). For both, higher values indicate that the images were rated as more offensive. All study materials are available from the corresponding author upon request.

3. Results

3.1. Experience of racial microaggressions

To examine the incidence of racial microaggressions in our sample, we recoded responses on each of the subscales for whether participants had not (responses of “1” were re-scored as 0) or had (responses of “2” or above were re-scored as 1) experienced at least one microaggression within each particular component. For each subscale, over the past 6 months People of Color experienced microaggressions with greater frequency than Whites: *Assumptions of Inferiority*, $\chi^2(1) = 7.54$, $p = 0.006$, Cramer's $V = 0.26$; *Second-Class citizen and Assumptions of Criminality*, $\chi^2(1) = 34.80$, $p < 0.001$, Cramer's $V = 0.56$; *Microinvalidations*, $\chi^2(1) = 7.93$, $p = 0.005$, Cramer's $V = 0.27$; *Exoticization/Assumptions of Similarity*, $\chi^2(1) = 24.76$, $p < 0.001$, Cramer's $V = 0.47$; *Environmental*, $\chi^2(1) = 11.36$, $p = 0.001$, Cramer's $V = 0.32$; *Workplace and School*, $\chi^2(1) = 11.72$, $p = 0.001$, Cramer's $V = 0.32$, Table 1.

To examine racial group differences in the average experience of discrimination, responses on all of the subscales were averaged into a single score where higher values indicate that an individual experienced more racial microaggressions. An independent samples t -test revealed that, as expected, People of Color ($M = 1.99$, $SD = 0.45$) reported experiencing more racial microaggressions than Whites ($M = 1.38$, $SD = 0.34$), $t(111) = 7.94$, $p < 0.001$, $d = 1.53$.

3.2. Perceptions of racial themed Internet memes

To examine whether there were racial group differences in ratings of offensiveness by type of Internet meme, a 2 (Participant Racial Group: People of Color vs. Whites) \times 2 (Internet Meme: racial themed vs. non-racial themed) Multivariate Analysis of Variance (MANOVA) with the first factor within-subjects was conducted. Box's M test of equality of covariance matrices was non-significant ($M = 0.77$, $F(3, 106,181) = 0.25$, $p = 0.86$), thus assumptions of homogeneity of variances were not violated. A main effect for participant racial group emerged, $F(1, 111) = 10.25$, $p = 0.002$, $\eta_p^2 = 0.09$. Overall, People of Color ($M = 3.78$, $SD = 0.69$) rated the memes are more offensive as compared to Whites ($M = 3.31$, $SD = 0.74$). A main effect of Internet meme also emerged, $F(1, 111) = 290.83$, $p < 0.001$, $\eta_p^2 = 0.72$; regardless of race of the participant, racial themed memes ($M = 4.32$, $SD = 1.00$) were perceived as more offensive than non-racial themed memes ($M = 2.60$, $SD = 0.80$). A significant interaction did not emerge, $F(1,$

¹ Although it is plausible that individuals identifying with different racial/ethnic groups might differ in terms of their experiences and perceptions, this was not the case for our sample. Replicating previous research, Black, Multiracial, and East/South Asian individuals did not reliably differ in their experiences of racial microaggressions across each subscale, $\chi^2s < 3.80$, $ps > 0.10$ (e.g., Owen et al., 2011). Nor did we observe racial group differences in perceptions of Internet memes, $F_s < 2.20$, $ps > 0.10$. In order to maximize the power of our comparisons, and in line with previous research in the area of microaggressions (e.g., Balsam et al., 2011; Nadal, 2011), we combined racial/ethnic minority participants into a single group, People of Color.

Panel A



Panel B



Fig. 1. Example of the memes included in the study. Panel A depicts a racial themed meme and Panel B depicts the comparable non-racial themed meme. Source image is available from http://www.funnyjunk.com/funny_pictures/224187/Wal+Mart+Fail/.

Table 1

Means (SD) and number of participants (% of sample) experiencing at least one racial microaggression for each subscale of the race and microaggression scale.

Race and microaggression scale (REMS) subscale	People of color		Whites	
	Mean (SD)	Number (%)	Mean (SD)	Number (%)
Assumptions of inferiority	1.38 (0.75)	19 (52.8%)	1.08 (0.25)	20 (26.3%)
Second-class citizen & assumptions of criminality	1.51 (0.83)	22 (61.1%)	1.04 (0.27)	7 (9.1%)
Microinvalidations	1.67 (0.73)	27 (75%)	1.32 (0.58)	36 (46.8%)
Exoticization/assumptions of similarity	1.69 (0.69)	34 (94.4%)	1.21 (0.42)	35 (45.5%)
Environmental	4.34 (0.72)	36 (100%)	2.58 (1.43)	57 (74%)
Workplace and school	1.46 (0.93)	12 (33.3%)	1.04 (0.21)	6 (7.9%)
Total REMS	1.99 (0.45)	36 (100%)	1.38 (0.34)	70 (90.9%)

Note: Number (%) refers to individuals who reported experiencing at least 1 microaggression in last 6 months on the subscales or on any of the subscales (Total REMS), respectively.

111) = 0.33, $p = 0.57$; People of Color and Whites did not reliably differ in their ratings of racial themed memes ($M = 4.68$, $SD = 0.95$ and $M = 4.15$, $SD = 0.99$, respectively) or non-racial themed memes ($M = 2.88$, $SD = 0.79$ and $M = 2.47$, $SD = 0.77$, respectively).

3.3. Relations between the measures

To determine if experiencing racial microaggressions corresponded to perceptions of Internet memes differently for People of Color and Whites, we conducted two separate regression analyses predicting either ratings of the racial themed memes or the non-racial themed memes from racial microaggressions (centered) and participant racial group (effect coded as +1 for People of Color and -1 for Whites) and the interaction term. In line with the possibility that experiencing racial microaggressions offline can impact perceptions of race-related content online, the model reliably predicted a unique amount of variance in perceptions of the racial themed memes, $F(3, 109) = 5.57$, $p = 0.001$, $R^2 = 0.13$. Racial microaggressions emerged as a reliable predictor, $\beta = 0.26$, $t = 2.31$, $p = 0.02$, whereas participant racial group did not, $\beta = 0.04$, $t = 0.31$, $p = 0.76$. These effects were qualified by the interaction between racial microaggressions and participant racial group, $\beta = 0.20$, $t = 2.20$, $p = 0.03$. Simple slopes analyses revealed that for Whites, racial microaggressions did not predict perceptions of racial themed memes, $\beta = 0.01$, $t = 0.09$, $p = 0.93$. However, for People of Color, those who experienced more racial microaggressions were likely to perceive the racial themed memes as more offensive, $\beta = 0.51$, $t = 3.02$, $p = 0.003$ (Fig. 2).

By contrast, the model only marginally accounted for variance in perceptions of non-racial themed memes, $F(3, 109) = 2.53$, $p = 0.06$, $R^2 = 0.07$. Participant racial group emerged as a marginally significant predictor, $\beta = 0.21$, $t = 1.75$, $p = 0.08$, such that People of Color viewed the non-racial themed memes as more offensive than Whites. The other predictors did not reliably contribute to the model, β s < 0.08, t s < 1.0, p s > 0.50.

4. Discussion

The goal of this study was to provide an empirical investigation of the correspondence between racial microaggressions experienced offline and perceptions of racial themed Internet memes for both Whites and People of Color. The results provide the first evidence that previous experience of racial discrimination can impact judgments of race-relevant images presented online. For People of Color, individual differences in racial microaggressions experienced in face-to-face interactions meaningfully predicted ratings of Internet memes; those who reported experiencing more racial microaggressions in the past six months rated the racial themed Internet memes as more offensive. As expected, this same pattern of results did not emerge for the non-racial themed memes. Further, even though People of Color and Whites did not differ in how offensive they perceived the racial themed Internet memes to be, ratings provided by White participants were not predicted by their previous experience of racial microaggressions. These results highlight the interplay between offline and online worlds; when users log on to the online world, they bring with them

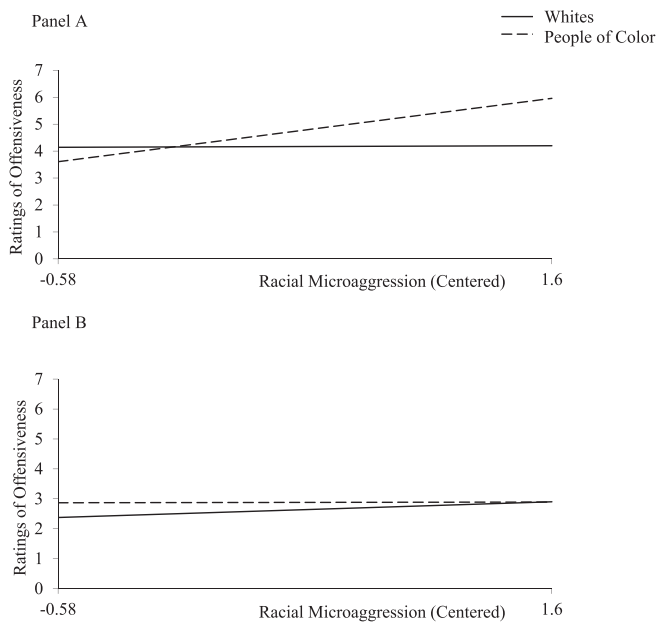


Fig. 2. Fitted regression of ratings of offensiveness for Internet memes (Panel A depicts racial themed memes, Panel B non-racial themed memes) on racial microaggressions (centered), moderated by participant racial group.

interpretational frameworks obtained from socialization that occurs offline.

4.1. Racial group differences in racial microaggressions

Despite the belief that racial prejudice is on the decline (Dovidio et al., 2002; Sue et al., 2007), People of Color continue to face racial discrimination in their daily lives (Donovan et al., 2012; Ong et al., 2013). Building on research conducted primarily in the United States, we provide the first evidence of the incidence of racial microaggressions in the United Kingdom. Replicating previous research (see Wong et al., 2013; for a review) every Person of Color in our sample reported experiencing at least one racial microaggression over the previous six months. Supporting the notion that Whites can experience racial microaggressions (Nadal et al., 2014; Sue et al., 2007), 91% of our White participants also reported experiencing at least one racial microaggression over the previous six months. However, People of Color reported experiencing racial microaggressions to a greater extent than their White counterparts (see also Nadal et al., 2014). This is perhaps not surprising given that in Western societies Whites hold the personal, institutional, and societal power to define the situation, and racial microaggressions are most likely to be experienced when individuals hold positions of low social power (Sue et al., 2007; Sue et al., 2008; Sue et al., 2008). Regardless, the frequency with which both Whites and People of color experience racial microaggressions is concerning as this type of subtle discrimination can have a negative impact on one's health, including increased negative affect, depressive and somatic symptoms, and decreased positive affect (Donovan et al., 2012; Huynh, 2012; Nadal et al., 2014; Ong et al., 2013).

Due to the subtle nature of racial microaggressions, individuals who experience racial discrimination may become increasingly sensitive to future transgressions in their environment (Dovidio et al., 2002; Major & O'Brien, 2005). As noted by Wong et al. (2013), more experimental studies are needed in order to better understand the factors that may contribute to how People of Color

(and other individuals holding positions lower in power; Sue et al., 2007) construe possible transgressions in their environment. By presenting our participants with one type of environmental microaggression, racial themed Internet memes (Clark et al., 2011; Sue et al., 2007; Tynes & Markoe, 2010; Tynes et al., 2013), we provide the first evidence that previous experiences with racial microaggressions may lead to an increased sensitivity to future transgressions in their environments, including online contexts.

4.2. Perceptions of racial themed Internet memes

Despite the potential of the Internet to offer an environment in which individuals may be freed from racial boundaries and the experience of racism, some users post blatant and subtle racially prejudiced content online (e.g., August & Liu, 2015; Clark et al., 2011; Hughey & Daniels, 2013). Perhaps reflecting that People of Color are the direct targets of this discrimination (Kettrey & Laster, 2014), racial minorities report experiencing more online racial discrimination as compared to their White counterparts (Pew Research Center, 2014; Tynes et al., 2013). Although qualitative and correlational studies have documented the existence of online discrimination, to date little research has examined how individuals directly respond to this biased content (cf. Lee-Won et al., 2015; Tynes & Markoe, 2010).

To contribute to this emerging research area, the current study utilized a within-subjects experimental design to compare Whites' and People of Color's perceptions of racial themed (e.g., a Black doll priced at half the cost as a comparable White doll) and non-racial themed (control images; e.g., a Black doll and comparable White doll priced for the same amount) Internet memes. Regardless of whether the image depicted racial themed or non-racial themed meme, People of Color, as compared to Whites, tended to rate the images as more offensive. Because the non-racial themed memes were derived from the racial themed memes and each participant saw both the original and edited versions, it is possible that People of Color construed both types of memes to be race-relevant and thus perceived all memes to be more offensive than Whites did.

In line with our hypotheses, racial group differences did not emerge in ratings of the racial themed Internet memes. All participants rated the racial themed memes as being more offensive than the non-racial themed memes. On the surface, a lack of racial group differences may seem to contradict previous research demonstrating that Whites tend to be less bothered by racially biased Internet content (Tynes & Markoe, 2010) and less aware of ambiguous, as compared to more blatant, forms of racial discrimination (Dovidio et al., 2002; Sue et al., 2007; Zou & Dickter, 2014). However, our experimental paradigm differed from previous research in two important ways. First, unlike Tynes and Markoe (2010), our participants did not provide public responses, such as posting comments on a Facebook wall. Instead, our participants rated memes in an anonymous online survey. Given that there was no need for our White participants to down-play their reaction to the racial themed Internet memes in order to avoid the personal discomfort that often comes with openly discussing race (Apfelbaum, Sommers, & Norton, 2008; Tynes & Markoe, 2010), our participants were likely to have rated the memes honestly. Supporting this possibility, Tynes and Markoe (2010) found that when White participants provided their initial reactions to or thoughts about racial themed party images, in their private three word responses they were more likely to identify the images as racist and inappropriate. By comparison, when asked to comment on the racial themed party image as if posting on a friend's Facebook wall, these more public responses tended to minimize or ignore the racist nature of the party images (Tynes & Markoe, 2010).

Second, unlike research demonstrating White participants'

reduced ability to detect ambiguous racial prejudice (e.g., Zou & Dickter, 2014; see also Dovidio et al., 2002; Pearson et al., 2009; for reviews), in the current study we utilized a within-subjects design where participants rated both racial themed and non-racial themed Internet memes in succession. Although this design is beneficial in controlling for individual differences in baseline ratings of offensiveness and reducing the number of participants required, asking participants to rate both types of memes could have heightened the salience of the racially-charged memes for our White participants. Making racial discrimination salient, for example by raising awareness of one's own level of racial bias (Perry, Murphy, & Dovidio, 2015) or, as in the current study, by presenting images that are identical except for the race of the target, can aid in the detection of subtle racism. It is possible that under conditions of private self-focus (Tynes & Markoe, 2010) and heightened salience (Perry et al., 2015), Whites' ability to identify the racialized content of the racial themed Internet memes was bolstered, resulting in ratings of offensiveness that did not differ from ratings provided by People of Color.

While these conditions, at first glance, appear to be limitations of the current research, they open up potential avenues for future research and interventions aimed at reducing online racial discrimination. For example, providing users with the opportunity to anonymously identify primary posts and secondary comments (e.g., comments on a thread) as being racially discriminatory, in addition to publically labelling content as offensive and potentially removing it from public view, may serve to reduce the climate of racial discrimination online (Grant, 2014; cf.; Hughey & Daniels, 2013). Further, online contextual (e.g., Daniels, 2012; Kettrey & Laster, 2014) and user-based (e.g., Nadal, 2008) interventions that highlight the salience of race and race-relations on the Internet may heighten awareness of racial microaggressions that occur online, encouraging individuals to think twice before posting, sharing, or affirming these subtle transgressions. Social interactions occur online at an astounding rate; in 2015, the Facebook social networking site alone registered 1.01 billion daily users (Facebook Newsroom, 2015). Given the popularity of social networking sites, a proportionately small number of studies have examined how Whites and People of Color may perceive racial discrimination on these sites, and/or on the Internet more generally. Although the current study is an important step in establishing how users directly react to subtle discrimination transmitted through Internet memes, clearly more research is needed to better understand how intergroup relations unfold online.

4.3. Relations between racial microaggressions and ratings of Internet memes

This experimental study provided an initial examination of how racial discrimination offline and online are associated. Although previous research has demonstrated that exposure to online discrimination is related to negative health-related outcomes for People of Color (e.g., Tynes et al., 2008, 2012; Umana-Taylor et al., 2015), individual predictors of direct responses to racial themed online content has received little empirical attention to date (cf. Tynes & Markoe, 2010). Supporting the role of individual differences in perceptions of online content, this study is the first to demonstrate that People of Color who experienced more racial microaggressions in face-to-face interactions within the past six months rated racial themed Internet memes as more offensive. This same relationship was not observed for People of Color's ratings of the non-racial themed memes or for the ratings made by White participants. This finding provides insight into how People of Color view online content, suggesting that previous experiences with racial discrimination offline may lead them to be attuned to

transgressions online (Dovidio et al., 2002; Major & O'Brien, 2005). Emphasizing the blur that exists between online and offline social worlds (e.g., Bargh & McKenna, 2004), these results support the possibility that experiences and socialization practices that occur offline can influence perceptions of online content. Just as the effects of online bullying can spill-over into the offline world (e.g., increased face-to-face bullying, reduced school performance; Schneider, O'Donnell, Stueve, & Coulter, 2012), how People of Color are socialized offline can influence the construal and understanding of race-relevant content presented online.

One potential explanation for why experiencing discrimination offline corresponded to perceptions of online racial discrimination for People of Color but not Whites is vigilance to discrimination. Although more direct research is needed, we suggest that vigilance to discrimination could mediate the relationship between racial microaggressions experienced in face-to-face interactions and perceptions of racial themed Internet memes. Replicating previous research conducted mainly in the United States (Nadal et al., 2014), in our United Kingdom sample we provide evidence that People of Color experienced racial microaggressions to a greater extent than Whites. Through this repeated exposure to discrimination, our participants may have become attuned to the subtle behaviour that reveals others' prejudice (e.g., Dovidio et al., 2002; Feldman Barrett & Swim, 1998). This increased vigilance for prejudiced behaviour could lead an individual to become increasingly sensitive to racial discrimination in their environment, which could result in the increased likelihood they would detect future transgressions (see Feldman Barrett & Swim, 1998; for a review) and, as seen the pattern of the current results, perceive these transgressions more negatively. Thus our findings are the first to suggest the intriguing possibility that the process of vigilance to racial discrimination extends from offline to online contexts. We provide initial evidence to suggest that previous experience of discrimination offline could potentially lead one to be more attuned to future transgressions, including those occurring online.

It should be noted that even though People of Color experience subtle (e.g., Clark et al., 2011; Steinfeldt et al., 2010) and blatant (e.g., August & Liu, 2015; Kettrey & Laster, 2014) racial discrimination online, the Internet can have a positive impact on these individuals, for example through online support groups that may affirm their marginalized (but important!) social identities (see Bargh & McKenna, 2004; Daniels, 2012; for reviews). Indeed, research has demonstrated that offline social connectedness can buffer the negative impact of racial microaggressions on African Americans' anxiety symptoms (Liao, Weng, & West, 2015). Further, strong ethnic identity and self-esteem was found to buffer the negative effects of online racial discrimination on the anxiety symptoms of adolescent African Americans (Tynes et al., 2012). Thus it is possible that groups offering support online may buffer the negative health-related outcomes that can result from experiencing both online and offline racial microaggressions. One promising Internet based intervention that aims to provide a supportive online community is The Microaggressions Project (<http://www.microaggressions.com/>). This webpage provides a space where microaggressions are made visible and includes a discussion forum where users can affirm marginalized identities and offer each other support. As a potential by-product, this intervention may also serve to reduce the pervasiveness of online and offline racial microaggressions by raising perpetrators' awareness of how these transgressions are subtly manifested. In line with the current findings, this community group illustrates the importance of making racial microaggressions salient, through a process of perceiving, reacting, and interpreting these transgressions (Sue et al., 2007) in a public domain. Future research is needed to provide empirical support for whether The Microaggressions Project,

and other similar interventions, can successfully reduce the occurrence and buffer the negative consequences of racial microaggressions.

4.4. Limitations and future directions

Our findings uniquely contribute to the emerging literature examining how individuals perceive and react to online racial discrimination, however there are potential limitations to this study. In line with other research (e.g., Balsam, Molina, Beadnell, Simoni, & Walters, 2011; Nadal, 2011), in order to maximize our statistical power we combined Black, Multiracial, and East/South Asian participants into a single group: People of Color. Although our sample sizes were not equal, proportionally the size of our White and People of Color samples were representative of the demographic composition of UK Universities (Higher Education Statistics Agency, 2016) and comparable to the sample sizes of other studies in this area (e.g., Tynes & Markoe, 2010; Tynes et al., 2013). We do not believe that combining responses across racial groups affected our findings as no reliable racial group differences were observed between Black, Multiracial, or East/South Asian participants, but this is a potential limitation of our study. Future research should strive to recruit more participants from different racial groups in order to examine how racial group differences might influence perceptions of online content. In order to do this, it is recommended that researchers aim to recruit individuals from the larger community, which would also serve to extend the results beyond student samples.

As reviewed above, compared to their White counterparts, People of Color experience more harassment online (Pew Research Center, 2014; Tynes et al., 2013) and more racial microaggressions (Nadal et al., 2014). For this reason, as a preliminary investigation into how experiences of discrimination offline can predict perceptions of discrimination online, we selected racial themed Internet memes where Blacks were the targets of discrimination. It is possible for Whites to also experience discrimination offline which, through a process of vigilance to discrimination, could predict ratings of biased memes. Because Whites' experience of racial microaggression did not reliably predict perceptions of biased memes targeting Blacks, we hypothesize that the relationship for Whites would only emerge in response to memes depicting racial discrimination against Whites (e.g., an image of a "redneck"). Further, because microaggressions are more likely to be experienced by those in positions of low social power (Sue et al., 2007; Sue et al., 2008; Sue et al., 2008), we anticipate that this relationship would be more pronounced in cultural contexts where White was not the dominant majority group (e.g., Hawai'i; Aumer et al., 2015). These potential avenues for future studies highlight the importance of cross-cultural and cross-contextual investigations in this emerging research area.

5. Conclusion

Extending previous qualitative and correlational research which examined the incidence and consequence of online racial discrimination, the current experimental study investigated how participants directly respond to subtle racial bias that is manifested online (see also Lee-Won et al., 2015; Tynes & Markoe, 2010). Our results demonstrate the blur between offline and online realities; socialization experiences offline can influence how people construe their online world. We found that for People of Color, the frequency with which they experienced racial microaggressions in their daily lives meaningfully predicted ratings of offensiveness for the racial themed Internet memes. Supporting the potential mediating role of vigilance to discrimination, the same relationship did not emerge

for ratings of the non-racial themed Internet memes or for the responses of White participants. We recommend that future experimental research continues to investigate how subtle racial biases are manifested and interpreted in online contexts. The findings from such research would provide insights useful for reducing the prevalence and consequences of online racial discrimination.

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