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Race and Reaction: Divergent Views of Police Violence and Protest against

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Since 2012, the United States has seen a renewed focus on police killings of racial and ethnic minorities, as well as protest against such violence. Moreover, recent polling data show an intensification of long-standing differences in Black and White Americans' attitudes toward police violence and protest. Here, we review recent polling, as well as our own series of experiments, to elucidate racial divides in attention, attitudes, and reactions to police violence and protest against it (e.g., Black Lives Matter). In addition, we report linguistic analyses of descriptions (N = 195) of protest images, showing that Black participants better understand the causes of these protests (d = .30) and view them more positively (d = .38) than Whites. If we wish for consensus on how to address police violence and protest against it, we must understand how and why the sociopolitical reality of race leads to divergent views of these issues.

> I think Ferguson laid bare a problem that is not unique to St. Louis or that area, and is not unique to our time, and that is a simmering distrust that exists between too many police departments and too many communities of color. (President Barack Obama, December 1, 2014, announcing the creation of the Task Force on 21st Century Policing)

Across the social sciences, it has long been argued that a disproportionate degree of violence against disadvantaged ethnic minorities is an indicator of systemic racism in a society (for reviews, see Bonilla-Silva, 2014; Goldberg, 2002; Sidanius & Pratto, 1999). Perhaps the most obvious form of such bias is the disproportionate use of deadly force against the unarmed. In an analysis of public records and media, the *Washington Post* estimated that 60% of the 965 people shot and killed by police in 2015 were unarmed Blacks and Latinos. More specifically, unarmed Black men were seven times more likely to be killed by police than

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unarmed White men. The recent sustained media attention to this long-standing racial bias is likely why there has been such strong public and political reactions to the recent killings of unarmed African American children and adolescents like 17-year-old Trayvon Martin (2012), 18-year-old Michael Brown (2014), and 12-year-old Tamir Rice (2014) as well as adults like Rekia Boyd (2012), Eric Garner (2014), and Philando Castile (2016).

The circulation of images of these and similar incidents on the Internet and other media have served to publicize a succession of police violence against African Americans in unprecedented ways. As the sociologist Weitzer (2015) has suggested, the seemingly serial nature of publicized killing after killing of an unarmed Black person every few months since Trayvon Martin's killing in 2012 can easily be viewed as a pattern of systematic bias. Given the sustained media attention—and political organizing in response, such as Black Lives Matter—public figures and the public at large have also been pressed into the widespread debate over these issues (see Cobb, 2015, 2016; Drake, 2014).

As social psychologists, our interest is in the ways in which everyday people in the United States react to apparent evidence of systemic racial bias, especially the sort of dramatic police killings of unarmed African Americans that has garnered so much public attention of late, and led to sustained social movements like Black Lives Matter, Say Her Name, and the many #JusticeFor ... hashtags, listing the names of the latest victims of police violence. Thus, we review our own and other's research on Black and White American's differential views of police violence and of Black protest against such violence. Policy, law, and political efforts would do well to take account of these marked differences by race, as they are likely to alter the effectiveness of such efforts.

Race and Differential Reactions to Police Violence

Black Americans oppose the illegal use of deadly force by police more strongly than do Whites (Cullen et al., 1996). Black Americans also report greater mistrust of, and worse attitudes toward, law enforcement in general than do their White counterparts (for reviews, see Brown & Benedict, 2002; Weitzer, 2015). These differences appear to be based in different interpretations of events as a good deal of survey research shows that African American's views of the police and criminal justice worsen dramatically after they learn of incidents of police violence (e.g., Goidel, Parent, & Mann, 2011). This was true of the Los Angeles Police Department's infamous videotaped beating of Rodney King in 1991 as well as the Los Angeles Police Department's less widely known violence against Blacks and Hispanics in the late 1990s (see Weitzer, 2015). The highly publicized recent succession of police killings of unarmed Black men and women since 2012

also appears to be leading to differential reactions between European Americans and African Americans.

Recent Events, 2012 Onward

The succession of highly publicized police killings of unarmed African Americans from 2013 to 2016 seems to have exaggerated the long-standing pattern of polarized responses by race (for a review, see Weitzer, 2015). For example, in a Washington Post/ABC News poll (2013), Black people tended to view unarmed 17-year-old Trayvon Martin's killing as unjustified and thus they saw George Zimmerman's acquittal as wrong. Alicia Garza, one of the founders of Black Lives Matter, took to social media after she heard the news of the acquittal. She posted a self-proclaimed love letter to Black people on her Facebook account, in which she stated, "the sad part is, there's a section of America who is cheering and celebrating right now. and that makes me sick to my stomach . . . I continue to be surprised at how little Black lives matter" (see Cobb, 2016). A large majority of White respondents in the *Washington Post/ABC News* poll (2013) expressed the opposite view. One of Zimmerman's lawyers, Mark O'Mara, summarized a common counter perspective—and one that the jury ultimately adopted in their verdict—when he stated, "George Zimmerman was never guilty of anything except firing the gun in self-defense" (see Alvarez & Buckley, 2013).

In addition, there were clear racial chasms in opinion polls (Pew Research Center, 2014a, 2014b) taken after Michael Brown's and Eric Garner's killings by police in the summer of 2014. For example, almost three times as many White respondents (52%) had faith in the investigations into Michael Brown's death than did Black respondents (18%). When the verdicts were passed, only 10% and 2% of Black respondents supported the decision not to indict the police killers of Michael Brown or Eric Garner, respectively; contrastingly, many more Whites than Blacks said that the decision to not charge the officers was correct in the deaths of both Michael Brown (64%) and Eric Garner (28%). One reason for this disparity in perceived justice may have to do with discrepancies in perceived cause. Similar to Garza's despair at the legal silence on the matter of Black lives after George Zimmerman's acquittal for killing Trayvon Martin, two thirds of Black respondents polled by Pew (2014b) reported that race was a "major factor" in the decision not to indict the officers involved in Michael Brown and Eric Garner's deaths. White respondents, on the other hand, were much more likely to say that race was "not a factor at all" in the case of Michael Brown's (60%) or Eric Garner's (48%) death (Pew 2014b).

Our recent research: Police violence against Black and White victims. Informed by these public opinion polls, we sought to examine the social psychological processes of attention, appraisal, and emotion in response to images of

police violence. We wanted to better understand how White and Black people interpret and react to the sorts of images they might see in the news or on social media after a new cellphone or dashboard camera video is released of a fatal encounter between police and citizen. Moreover, we wanted to map these reactions in real time, rather than asking for opinions after the fact. To do so, we conducted a series of experiments using a variety of methodologies—from self-report to brain activity—to track over time Black and White participants' reactions to novel, but archetypal, images of police violence.

In one recent study of 99 Black and 96 White adults on Amazon's online research platform MTurk, we showed 15 captioned photos of police and other violence against African Americans that were either highly publicized and recent (e.g., Trayvon Martin, Michael Brown, Eric Garner, Tamir Rice), less publicized and recent (e.g., Jerame Reid, Jonathan Ferrell, Rekia Boyd), or less recent (e.g., Rodney King, Amadou Diallo; see Figure 1a). Black and White participants were moderately familiar with only the highly publicized incidents (i.e., Trayvon Martin, Michael Brown, Eric Garner, Rodney King). However, Black participants tended to be moderately more familiar than White participants with all of the incidents (Leach, Reinka, & DeRosa, 2017).

Their differential familiarity with past instances of police and other violence against Black victims should lead Black and White people to differentially attend to and cognitively process novel examples. To examine this, in Reinka and Leach (2017) we conducted an onsite experiment with 60 African American and 74 European American undergraduates whom we showed a series of little known photos of police violence against Black and White victims (see Figure 1b). Using event-related potential (ERP) indicators of neurological activity, we recorded participants' early unconscious attention to novelty (the N1, P2, and P300) and their later semiconscious attention to motivationally relevant stimuli (the LPP). Consistent with White participant's relative unfamiliarity with the subject, the early ERPs showed that White participants engaged in more effortful memory updating and, accordingly, devoted more early attention to images of police violence than Black participants. As this is indicative of attention to novelty, White participants appeared to find the images of police violence more novel. However, the late semiconscious ERP (the LPP) suggested that police violence had moderately more motivational relevance for Black participants than White participants. This was especially true for the violence directed at Black victims, which led to the greatest LPP among Black participants.

In addition to being more familiar with past incidents of police and other violence against Black people, Black participants reported feeling more "attentive" (i.e., attentive, alert, concentrating, determined) to the novel images we presented them of police violence against Black victims. In contrast, White participants reported more "surprise" (i.e., surprised, amazed, astonished) at these same images. A mediation analysis showed that Black participants' greater familiarity and

Fig. 1. (a) Example images of publicized cases of violence; (b) example images of police violence against White and Black victims. [Color figure can be viewed at wileyonlinelibrary.com]

Fig. 1. *Continued.*

attentiveness (and lesser surprise) explained the greater motivational relevance of Black victims of police violence indicated by the late LPP waveform of brain activity.

In another study with 99 Black and 100 White MTurk workers recruited online, we corroborated the preceding study by examining conscious, self-reported emotion in response to these same novel images of police violence (Leach et al., 2017). Much more morally outraged anger (e.g., angry, outraged, furious), and more self-assurance (e.g., pride, confidence, and strength), was reported by Black participants in response to Black victims of police violence. In addition to their moderate anger, Black participants reported more sadness and fear in response to Black victims of police violence than did White participants. In addition, those who were most strongly identified as Black (e.g., viewed the group as central to their self-concept) tended to report stronger emotions in response to Black victims of police violence. Taken together, these findings are consistent with recent models of group-based emotion, which argue that individuals feel more strongly about events that are relevant to the most salient and important aspects of their group membership (for reviews, see Iyer & Leach, 2008; van Zomeren, Leach, & Spears, 2012).

Consistent with our neurological evidence regarding motivational relevance, White participants reported less emotion about police violence than Black participants and did not much distinguish between Black and White victims. Thus,

White participants felt "a little" anger and "very slight" sadness and fear about police violence. They reported almost no guilt or shame. This pattern of results suggests that White participants did not see police violence as relevant to their group membership (for a review, see Iyer & Leach, 2008) or to their advantaged position in U.S. society (for a review, see Leach, Snider, & Iyer, 2002). Perhaps not surprisingly, more conservative White participants reported even less emotional reaction to Black victims of police violence.

Race and Differential Reactions to Protest of Police Violence

Inspired by Garza's fateful Facebook post in response to George Zimmerman's acquittal for the killing of Trayvon Martin (Cobb, 2016), Alicia Garza, Opal Tometi, and Patrisse Cullors, as well as a community of cultural workers, artists, and technical assistants, sparked the twitter hashtag #BlackLivesMatter in July 2013 with the intent to organize community members against what they perceived to be racially motivated violence (Black Lives Matter, "The Creation of a Movement," n.d.). At least since the civil rights era in the 1960s, African Americans have viewed protests against racial bias more favorably than do White Americans, seeing them as more helpful (as opposed to hurtful) and more peaceful (as opposed to violent; e.g., Bobo, 1988). Recently, a Pew (2014a) poll found that 65% of Blacks said the police response to the protests in Ferguson, MO, had gone too far. Only 33% of Whites agreed. Moreover, during the height of the Ferguson protests, 46% of nationally polled Blacks stated they had very little confidence that the police treat Blacks and Whites equally, and 40% said they had very little confidence that police won't use excessive force on members of their community. In contrast, 35% of White respondents said they had a great deal of confidence that police treat racial groups equally, and 36% said they had a great deal of confidence that the police officers would not use excessive force (Drake, 2014).

Regarding the protests in Baltimore, MD, surrounding the police killing of Freddie Gray, national polls also showed a divergence in views of the protests: 55% of Blacks viewed incidents of violent protest as legitimate outrage, whereas 68% of Whites viewed the protestors as opportunistic criminals (Rasmussen Reports, 2015). While Black Lives Matter considers themselves dedicated to, "justice, liberation, and peace . . . " (Black Lives Matter, "Guiding Principles Statement," n.d.), others are not convinced. The mayor of Baltimore at the time declared the protesters to be "thugs who – in a very senseless way – are trying to tear down what so many have fought for" (see Yan & Ford, 2015). More than that, a majority of Whites, 67%, generally support the effectiveness of protest in improving the country, unless the protesters are specifically framed as Black Americans, in which case White support drops to 45%. In comparison, 65% of non-Whites polled believe the country is better off when Black Americans speak up (Public Religion Research Institute, 2015). As with many other societally

Fig. 2. Example images of Black protest.

disadvantaged groups (for a review, see van Zomeren et al., 2012), African Americans' positive view of protest against racial bias is tied to a politicized group identity and to a sense of collective empowerment that fuels the expectation that protest can improve disadvantage (see Bobo & Gilliam Jr., 1990).

Our Recent Research: Protest in Reaction to Police Violence

With our series of experiments, we aimed to not only examine the role of race in reactions to police violence, but also in reactions to the recent protest movements against such violence. In the Reinka and Leach (2017) study described above, we also showed the 60 Black and 74 White undergraduates 30 little-known photos of (largely) Black protest, many of which were taken from the Black Lives Matter movement (see Figure 2). As with the images of police violence examined in this study, the ERP measures of neurological activity showed that Whites directed more early attention to the images of Black protests than did Black participants. This suggests that White participants found these images more novel than did Black participants. As was also the case with the images of police violence in this study, the later ERP measure of neurological activity suggested that the images of Black protest had more motivational significance for Black participants than for White participants. Thus, as with images of police violence, European Americans

found images of Black protest more novel, but they seemed to matter more to African Americans.

We showed these same 30 photos of Black Lives Matter and other protests to the above-discussed sample of 99 Black and 96 White MTurk workers (Leach et al., 2017). African Americans reported much more self-assurance emotions (e.g., pride, confidence, strength) than European Americans in response to the images of Black protest. In fact, their moderate self-assurance outstripped Black participant's other emotions about Black protest, including their "little" sadness and "very slight" anger. As suggested by recent models of the motivation to protest (for a review, see van Zomeren et al., 2012), African Americans appeared to feel empowered by seeing members of their in-group take to the streets to proclaim that "Black Lives Matter." In contrast, White participants felt only "very slightly" sad, angry, and self-assured in response to images of Black protest. In other words, European Americans did not feel much about Black protest. This is consistent with our above-discussed findings that Black protest has little motivational significance for White participants even if it is more novel and thus attention grabbing. As with images of police violence, images of Black protest such as Black Lives Matter marches may not engage European Americans psychologically as individuals or as group members (for a general discussion, see Iyer & Leach, 2008) and/or they may not invoke their sense of injustice (see van Zomeren et al., 2012). It is not uncommon for members of societally advantaged groups to be fairly indifferent to protest by the disadvantaged for these, and other, reasons (for a review, see Leach et al., 2002).

In the online studies described above, we also asked participants to describe what was happening in the photos in their own words. Open-ended responses like this can side step some of the biases inherent to self-report measures because they give participants more room to express themselves freely (Chung & Pennebaker, 2007). Thus, we aimed to corroborate our neurological and self-report findings, as well as the above-reviewed public opinion research, by analyzing the language used by African Americans and European Americans to describe the images of Black protest against police violence to which they were exposed in our study (see Figure 2).

The Present Study

Past research has shown that Blacks tend to pay more attention to protest movements (Goidel et al., 2011), have more positive attitudes toward them (Bobo, 1988; Eisinger, 1974), and believe protest to be more legitimate (Rasmussen Reports, 2015) as well as more effective (Eisinger, 1974), than do Whites. Given the greater attention paid to protests such as the Black Lives Matter movement, we expected these attitudes and expertise to be reflected not only in the rigid

restraints of polling check-boxes, but in Black participants' free-response writing with regard to images of Black protest against police violence.

In addition to more traditional, fully qualitative analyses of open-ended responses, software such as the Linguistic Inquiry Word Count (LIWC Pennebaker, Boyd, Jordan, & Blackburn, 2015) enables quantitative analysis of language use in open-ended responses. In fact, LIWC categorizes thousands of words and word-stems into dozens of categories, which encompass parts of speech (such as articles, prepositions, pronouns) as well as psychological processes (such as affect, cognitive processes) and tone of language (Pennebaker et al., 2015).

In line with our previous work, as well as public opinion research from more recent (i.e. Black Lives Matter) as well as older (i.e. Civil Rights) racial movements, we expected that African Americans would write with more authority in their descriptions of the images of Black protest and use more causal language, including writing more about the incidents that spurred the protests, than would White participants. Whites, on the other hand, should be less certain in their descriptions and therefore demonstrate more hedging. Also, in line with our research showing that Whites' relative unfamiliarity with the protest movement requires them to more effortfully update their working memory, we expect White participants' descriptions of protest to show more cognitive complexity, for example, by using more "discrepancy" language as LIWC calls it. Additionally, as Blacks have more positive attitudes toward protest, we expected them to use more positive language to describe the protests than Whites. In contrast, we expected White participants to describe the protests with more negative language than Black participants, exemplified by the phrasing by the former Mayor of Baltimore. Also, in line with research on protest as a form of collective action against perceived injustice (for a review, see van Zomeren et al., 2012), we expected Black participants to include more justice-related words and more affiliative terms in their descriptions of the images of the Black Lives Matter marches and other protest.

Method

Participants. One hundred ninety-five U.S. born adults (96 European American/White, 99 African American/Black; 76 men, 119 women; $M_{age} = 36.7$, $SD_{age} = 11.8$) participated on MTurk. Participants were recruited based on their primary identification as African or European American, native U.S. born, and current residence in the United States. On average, participants considered themselves politically moderate (1 = *extremely liberal*, 7 = *extremely conservative*, $M = 3.7$, $SD = 1.5$; Leach et al., 2017).

Procedure. Participants viewed 30 relatively unknown images of (largely) Black protest, such as those from the Black Lives Matter movement (see

Figure 2). The images were very homogenous and all images were rated as equally unpleasant and arousing by White and Black participants, regardless of the order of presentation (Leach et al., 2017). After viewing all of the Black protest photos, participants were asked, "In your own words, please briefly describe what was happening in the set of images you just saw." Participants typed their responses in an open text format with no restriction on length.

Coding. As mentioned above, LIWC includes a dictionary of almost 6,400 words and word stems, which it can count using its 82 categories. Each LIWC category represents the percentage of words used pertaining to that category, relative to the total number of words a person writes. Thus far, language analyses with word-count software such as LIWC have largely focused on function words, or particles, which include pronouns, prepositions, articles, conjunctions, and auxiliary verbs (see Chung & Pennebaker, 2007). These small words, while seeming insignificant as the glue that holds language together, can be powerful predictors of emotion, personality, or social relationships (see Chung & Pennebaker, 2007; Tausczik & Pennebaker, 2010). Thus, we used the standard LIWC category of function words and its five sub-categories to examine Black and White participants' descriptions of Black protest of police violence (see Table 1). However, past research on function words has used them mainly to examine highly personal, individual events. Function words may or may not be a good way to examine language use in the description of images of Black protest. As such, it was important for us to also examine four other standard LIWC categories that seemed relevant to Black protest: *clout* (i.e., authoritative tone), *causality* language (e.g., because, depending), terms of *affiliation* (e.g., together, group), and discrepancy language (e.g., should, couldn't, and other words that focus on an alternative reality).

LIWC also allows researchers to create custom categories in order to count word usage relevant to their studies. In our case, we created five custom categories of word usage that struck us as especially relevant to Black Lives Matter and other Black protest: positive protest descriptors (e.g., gather, march, rally, or stand), negative protest descriptors (e.g., riot, violence, thug, crime), explicit references to the Black Lives Matter movement (e.g., Michael Brown, Eric Garner, Ferguson, shooting), (in)justice-related words (e.g., justice, unjust, rights), and (un)certainty words (e.g., something, sure). These five custom categories were confirmed by qualitative evaluations of the descriptions of Black protest as well as a factor analysis of the most commonly used words, a technique referred to as the Meaning Extraction Method. This method allows us to determine which words are commonly used together in participants' writings, creating a quantitative extraction of the themes and underlying schemas in language use (e.g., Ramírez-Esparza, Chung, Sierra-Otero, & Pennebaker, 2012).

Table 1. Means and Standard Deviations of Black Protest Image Descriptions

Dimension	Example	White participants		Black participants			
		M	*SD*	*M*	*SD*	*t*	*d* (effect size)
Word count		19.71	18.68	16.71	13.96	1.27^	.18
Function words (%)	It, to, no, very	41.04	15.10	39.27	12.58	0.89	.10
Pronouns (%)	I, them, itself	6.78	7.60	5.41	6.92	1.32	.19
Prepositions (%)	To, with, above	14.74	8.27	15.94	9.11	−0.96	.14
Articles (%)	A, an, the	5.80	6.24	5.45	5.08	0.42^	.06
Conjunctions (%)	And, but, whereas	4.62	4.97	4.48	5.71	0.19	.03
Auxiliary verbs (%)	Am, will, have	7.43	7.21	7.12	7.49	0.25	.04
Clout[a]		59.7	31.63	68.2	30.31	−1.92^{+}	.28
Causal (%)	Because, effect	0.46	1.60	1.08	2.47	−2.10^*	.30
Affiliation (%)	Ally, friend, social	1.32	3.32	2.60	4.27	−2.34^*	.34
Discrepancy (%)	Should, would	0.47	1.79	0.12	0.54	1.84^+	.27
Custom categories							
Justice (%)	Just, injustice, equality	0.63	1.96	2.90	7.84	−2.79^*	.39
Positive protest (%)	Gather, rally, stand	1.82	6.28	4.74	8.74	−2.67^*	.38
Negative protest (%)	Riot, violent, thug	0.85	2.64	1.45	10.16	−0.56	.08
Uncertainty (%)	Something, sure	1.37	5.63	0.21	2.01	1.9^+	.28
Black Lives Matter (%)	Police, Ferguson, Garner	6.17	8.94	7.66	10.45	−1.07	.15

[a]Clout is not based on a percentage of word usage, but is instead on a 0–100 scale, with higher scores indicating a more authoritative tone.
*$p < .05$. $^{+}p < .10$. ^Significant Levene's test for heterogeneity of variance.

Results and Discussion

For all outcomes of interest, we conducted independent samples *t* tests to assess the difference between Black and White participants. Some analyses violated Levene's test for equal variances, in which case we report the adjusted degrees of freedom and *t* values. These adjustments made no meaningful difference in the results. Means and standard deviations are presented in Table 1, as are the corresponding *t* values and the *d* effect size of the difference between the means for Black and White participants.

Participants produced a modest average of 18.2 words ($SD = 16.5$) per description. The number of words a person writes in reaction to a prompt can reflect psychological engagement with the task, as those who are more engaged will find more to write on a topic (see Tausczik & Pennebaker, 2010). Thus, it is

important to note that there was no difference in the number of words Black and White participants produced, $t(175.78) = 1.27$, $p = .207$, $SE = 2.37$, $d = .18$ (see Table 1). Therefore, we can conclude that differences in engagement are an unlikely alternative explanation of the results we report below.

LIWC categories. As shown in Table 1, we found no differences between Black and White participants in their overall use of function words, $t(193) = 0.89$, $p = .374$, $SE = 1.98$, $d = .10$. Nor did participants differ in their use of any of the specific types of function words, all $p > .18$, all $d < .20$. As many of the past analyses of function words focused on self-concepts and self-reflection, it is perhaps unsurprising that we see no differences in function word use between Black and White participants' descriptions of images of Black protest. The topic written about here is quite different to the highly personal individual events typically examined with LIWC analyses of function words.

Although Black and White participants used function words to an equal extent in their descriptions of Black protest, we did see differences in the content of their descriptions. Black participants wrote in a slightly more authoritative tone than White participants, as evidenced in the LIWC 2015 tonal category of clout, $t(193) = –1.92$, $p = .057$, $SE = 4.44$, $d = .28$. In addition, Black participants used more causal language (e.g., because, how, depending) than White participants, $t(168.36) = –2.10$, $p = .037$, $SE = 0.297$, $d = .30$, referring to the rationale for the protests, not simply describing the occurrence thereof. For example, one Black participant described the scenes as, "People protesting the injustices of police brutality and excessive force, very commonly done toward people of color." Taken together, these results could indicate Black participants' greater understanding of the issues surrounding Black Lives Matter protests, as Black participants more authoritatively speak to the causes for the gatherings. Black participants also used greater affiliative language (e.g., social, together, group), $t(184.26) = –2.34$, $p = .020$, $SE = 0.547$, $d = .34$, than White participants in describing the protests. One person placed themselves in the scene with the protesters, writing, "Black people are gathering, protesting, and letting the world know that we are outraged. Fighting for our lives and safety." This focus on social relationships could indicate that Black participants feel more solidarity with the protesters than do White participants. This is consistent with the self-reported feelings of self-assurance in response to the images of Black protest that we saw in our prior analyses discussed above.

White participants, in contrast, used marginally more discrepancy related words (e.g., should, would, couldn't) to describe the images of Black protest, focusing on an alternative reality rather than the one presented, $t(111.70) = 1.84$, $p = .068$, $SE = 0.191$, $d = .27$. This may reflect some subtle (or not so subtle: "blacks were marching and protesting about shootings when they should be finding jobs") negative attitudes toward the protesters or the movement as a whole. However, greater use of discrepancy words has also been found to be a marker

of greater cognitive complexity. Our other research suggests that, since they pay less attention to protests regarding racial issues, Whites have to engage in more effortful cognitive processing of these images (Reinka & Leach, 2017). This may be reflected in the use of the more complex discrepancy language in their written descriptions.

Custom categories. In their descriptions of the images of Black protest, Black participants were more likely than Whites to use justice-related words in phrases such as "people fighting for equal rights," or "protests for equality," $t(110.58) = –2.79$, $p = .006$, $SE = 0.813$, $d = .39$. Consistent with this, Black participants used more positive language to describe the images of protest, such as "peaceful protest" or, as one participant described the scenes, "African Americans are standing up for their rights," $t(178.11) = –2.69$, $p = .008$, $SE = 1.09$, $d = .38$. These findings affirm past research that African Americans interpret collective action by their group as an empowering act of solidarity against injustice. However, contrary to our hypotheses, Whites were no more likely than Blacks to use negative descriptions of the protest (such as "riot" or "thug"), $t(193) = –0.556$, $p = .579$, $SE = 1.07$, $d = .08$. This may be due, in part, to the small percentage of negative descriptions of the protest by both groups of participants.

White participants were slightly more likely to use uncertainty terms in their descriptions of the content of the protest photos than Black participants, $t(118.23) = 1.90$, $p = .060$, $SE = 0.610$, $d = .28$. That is, Whites hedged a little more in their writing by offering explanations that included phrases such as, "I'm not sure," or "people are protesting something." Hedging is fairly common in advantaged group member's descriptions of others actions against disadvantage and may serve to maintain neutrality in the midst of controversy or conflict (for a discussion, see Leach et al., 2002).

There was no difference between Black and White participants in explicit references to Black Lives Matter, $t(193) = –1.07$, $p = .287$, $SE = 1.395$, $d = .15$. Thus, despite Whites' slightly greater tendency to use uncertainty words, both groups had a similar understanding that these protests were related to the Black Lives Matter focus on police killings of unarmed people of color. This relatively high rate of reference to Black Lives Matter and related content is likely the result of the images being fairly clear in content and thus unambiguous to both European Americans and African Americans.

General Discussion

We reviewed a variety of national and local polls to show that White and Black Americans have long had divergent views of police and policing that have grown further apart in the wake of the publicized succession of police killings of unarmed Black young people and adults since Trayvon Martin's killing in 2012.

Polls show that this dramatic racial divide characterizes opinions and beliefs about these killings and the indictments, trials, and punishments that have or have not followed from them. In short, Black Americans tend to believe that there is clear racial bias in police use of deadly force and in the government's handling of such cases. White Americans tend to believe that the police and the courts are fair and that any racial disparity is due to other factors, such as disparate involvement in crime. Consequently, White Americans are less likely to endorse protests as helpful or positive, and are quicker to label those engaged in collective action as "thugs" or "criminals." Because Black Americans perceive injustice to be the cause of the protests, they understandably show more support for the protests aiming to counter perceived injustice.

Likely as a result of these longstanding and profound differences in outlook, our recent studies of brain activity, affect, and emotion have found White participants to devote more early attention to images of police violence against Black people as well as to images of Black protest against it (Leach et al., 2017; Reinka & Leach, 2017). Despite the apparent novelty of these images, White participants appear to appraise them as less motivationally relevant and thus White participants report feeling relatively little in response. In contrast, Black participants devote less early attention to the images probably because they are less novel in content. However, this familiarity with police violence and protest against does not temper the motivational relevance of novel images of violence and protest. African Americans' neurological, affective, and emotional reactions showed an agitated and empowered response to police violence and to Black protest against it such as in Black Lives Matter marches.

By and large, the present study of language use corroborated our own and other previous research regarding Black protest by showing that African Americans respond more positively than European Americans to images such as those from Black Lives Matter marches. Language use likely offers a conservative estimate of this difference, as we simply asked participants to describe scenes of Black protest; we did not ask them directly for their opinions or attitudes on protest movements such as Black Lives Matter. In addition to being a conservative test, our formal analysis of the language used to describe images of Black protest may have enabled participants to express themselves more freely than would have been the case with direct questions. This may have been especially liberating to European Americans, who may have particular concerns about appearing racist or reactionary when discussing highly charged issues like police violence against Black people and Black protest against it such as the Black Lives Matter movement.

Specifically, we saw corroboration of the differential attitudes toward protest that is so evident in survey research. Black participants' descriptions of the images of Black protest were written in a more authoritative tone, and were more focused on the causes of the protests. Also, Black participants used more positive words to describe the protests than did Whites, showing more positive attitudes toward

this form of collective action. Finally, Black participants used more empowered language to describe the images of Black protest, evidenced by the greater use of justice- and affiliation-related words. Taken as a whole, these results suggest that Black protest engenders a sense of political solidarity and collective empowerment among many African Americans. Indeed, from its infancy, the Black Lives Matter movement has been clear in its goals to empower change by eschewing traditional leadership hierarchies (Cobb, 2016) and instead focusing on building and nurturing "a beloved [Black] community" through actions that are "restorative, not depleting" (Black Lives Matter, "Guiding Principles Statement," n.d.). White participants, on the other hand, were slightly more likely to use uncertain language in their descriptions, using more hedging. They were also marginally more likely to use discrepancy-related words, describing what should or could be occurring, perhaps focusing on counterfactuals, rather than the reality of the situation presented in the images.

Word count software such as LIWC is a boon to analyses such as ours in that it allows efficient, unobtrusive analysis of the psychological phenomena embedded in text, without the constraints or cautions inherent to survey responses and other self-report questions. However, unlike traditional thematic coding of language, word counts leave out the context in which the words were spoken and may thus miss some more subtle meaning. Our example mentioned above of one White participant's use of discrepancy words illustrated this, as a disparagement of Black protestors was simply counted as one Black Lives Matter reference ("shootings") and one discrepancy term ("should"). Of course, by relying on explicit word usage, our approach may also underestimate the sentiments of participants less willing to express themselves so directly. Another limitation is that we did not require participants to write for a certain amount of time or generate a minimum number of words as is common in other language research (e.g., Boyd et al., 2015). Hence, our total word counts are smaller than one might typically see, which leaves us with only modest statistical power. This makes our consistent results with our custom categories more impressive, but it also cautions us about overgeneralizing marginal effects or interpreting the null effects for many of the standard LIWC categories such as function word use. Finally, there is some debate as to the representativeness of MTurk samples (for a review, see Paolacci & Chandler, 2014), and therefore, some hesitation is warranted in generalizing from these or any other online sample to the wider population. Once again, however, the strength of our findings comes from its corroboration of studies with other samples and research methods, both from our own work and that of others'.

Implications

Reflecting on Michael Brown's dead body lying in a Ferguson, Missouri, street for hours, the historian Jelani Cobb (2015) wrote:

> It had the effect of reminding that crowd of spontaneous mourners of their own refuted humanity. A single death can be understood as a collective threat. The media didn't whip up these concerns among the black population; history did that.

As with decades, if not centuries, of prior examples, the "collective threat" of recent police killings of unarmed Black men and women has culminated in worse attitudes toward police and less faith in unbiased applications of the law. Likely as a result, our own studies show that African Americans react more strongly to novel instances of police violence against Black people despite being more familiar with such events. Indeed, our linguistic analyses showed that African American participants wrote in more affiliative terms when describing the scenes of protest, perhaps mentally placing themselves in the scenes or in what they see as the arc of justice, more so than European American participants. In this way, they see the protests as expressions of empowering solidarity designed to address injustice (e.g., van Zomeren et al., 2012). Taken in that light, it is perhaps unsurprising that Blacks also view protests like those of the Black Lives Matter movement more favorably than do Whites. Once again, this has been shown for decades in opinion polling (e.g., Bobo, 1988) and social psychological examination (van Zomeren et al., 2012). It was also shown in our linguistic analyses, as Black participants used more favorable descriptions of the protest scenes than their White counterparts.

Recent social psychological approaches to protest, such as van Zomeren et al.'s (2012) dynamic dual pathway model, argue that group-based anger and efficacy are two important routes to such collective action. Our studies of Black and White participants' responses to novel images provided evidence consistent with each route. Black participants were especially angry about perceived injustice, consistent with the neurological evidence that images of police violence and protest against it were more motivationally relevant. This was partly based in Black participants' identification with their ethnic group. And, in response to images of police violence, and especially protest against it, Black participants reported feeling the empowered efficacy of self-assurance. Thus, from attention, to appraisal, to emotion, Black participants appeared to be energized by images of police violence and (Black) protest against it. Because seeing like-minded others share one's anger and be willing to protest serves to bolster individual's own anger and efficacy (van Zomeren et al., 2012), we may expect that images of Black protest such as those we examined can increase Black individuals' willingness to protest. In this way, the spread of images of protest in traditional and social media may bolster support for and engagement protest which can, of course, increase pressure for change in policy and practice.

White Americans are less sure about the reasons for Black protest and focus more on the discrepancies between the reality of the situation and what might have been: If only Michael Brown hadn't stolen the cigarillos, Trayvon Martin hadn't been walking with his hood up in that neighborhood, or Tamir Rice hadn't

been playing with a toy gun. These views seem consistent with White American's lesser familiarity with police and similar violence and their more muted emotional reactions to it. Taken together, the evidence we have gathered suggests that Whites view police violence and protest against it with some degree of indifference. This is not unusual among those whose structural advantage in society protects them from adversities such as police violence or poverty (Leach et al., 2002; Sidanius & Pratto, 1999). However, this indifference does not seem to be sourced from a lack of awareness of this issue, as both Black and White participants in our linguistic analyses were equally able to recognize the images as Black Lives Matter protests and describe them as such. Moreover, social media makes the spread of such information so easy, across such a wide spectrum of social groups, as to render it almost inevitable that one will run across a high-profile case of police brutality or the protests against it (see Freelon, McIlwain, & Clark, 2016). This indifference also does not seem to be the result of not noticing police violence or protest against, as our neurological evidence actually suggests that White participants devoted more early attention to these images, which they actually found surprising. Instead it seems that many White participants disengaged from the images in the later stages of processing when more motivated attention and appraisal result in emotion and action.

Popular will for the reform of police, law, and policy may depend on interested parties moving White people from hedges, uncertainty, and what might have been to a commitment to bringing about what should be (see Leach et al., 2002). It is as yet unclear how to render police violence, and the racial disparities in it, more motivationally significant to European Americans. One obvious possibility is the promotion of more egalitarian views of race, such that "Black Lives Matter" more to White Americans. Interestingly, Leach et al. (2017) found that only those Whites high in racially egalitarian attitudes reported emotional reactions to police violence similar to those of Blacks. For instance, the most racially egalitarian Whites expressed a great deal of anger at police violence toward Black (and White) victims. This suggests that racial egalitarianism is tied to a more critical view of the police use of violence in general, somewhat independent of the skin color of the victim. It is thus possible that the sociopolitical reality of race in the United States is more strongly determinant of views of police violence than of views of who is policed violently. This is an important question for future work.

If fostering racial egalitarianism proves too onerous or slow a task, then we can shift the conversation to the more general topic of a broken justice system, as some groups are currently attempting to do (e.g., The Center for Policing Equity). Police and other judicial reform has enjoyed a recent surge in bipartisan support from lawmakers who believe that the judicial budget is far higher than necessary, as well as those who have social justice motives at heart (e.g., Bade, 2015). Alternatively, if racialized police practice could be delicately packaged as a threat to American values such as freedom, independence, and liberty, then, too,

might unlikely partnerships become possible. As we and others have shown, the issue is European Americans' lack of motivational engagement with the issues of police violence and the protest against it. Therefore, advocacy groups would do well to think creatively of how to make the issue seem relevant to those who otherwise would not face these issues in the way that African Americans and other groups of color are forced to do.

If police, politicians, and policy makers are to successfully engage African Americans on issues of policing, it seems important to acknowledge their point of view and its basis in both past and present reality. At the moment, a racial divide in understanding appears to drive a racial divide in approach. If we as a society wish to recognize—rather than refute—Black humanity, we must *prove* that Black lives matter just as much as any other by eliminating illegitimate discrepancies in police conduct and the application of the law. Without evidence of real reform, African Americans have little reason not to worry about bias in their own and other group member's dealings with the police. This may exacerbate the problem, as each party's suspicions of the other complicate interactions and heighten tensions. The results can be fatal.

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