



## Reports

Attending to threat: Race-based patterns of selective attention <sup>☆</sup>Sophie Trawalter <sup>a</sup>, Andrew R. Todd <sup>a</sup>, Abigail A. Baird <sup>b</sup>, Jennifer A. Richeson <sup>a,\*</sup><sup>a</sup> Department of Psychology & Institute for Policy Research, Northwestern University, Swift Hall, 2029 Sheridan Road, Evanston, IL 60208, USA<sup>b</sup> Department of Psychology, Vassar College, 124 Raymond Ave., Poughkeepsie, NY 12604, USA

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## ABSTRACT

The present research investigated the extent to which the stereotype that young Black men are threatening and dangerous has become so robust and ingrained in the collective American unconscious that Black men now capture attention, much like evolved threats such as spiders and snakes. Specifically, using a dot-probe detection paradigm, White participants revealed biased attention toward Black faces relative to White faces (Study 1). Because the faces were presented only briefly (30-ms), the bias is thought to reflect the early engagement of attention. The attentional bias was eliminated, however, when the faces displayed averted eye-gaze (Study 2). That is, when the threat communicated by the Black faces was attenuated by a relevant, competing socio-emotional cue—in this case, averted eye-gaze—they no longer captured perceivers' attention. Broader implications for social cognition, as well as public policies that reify these prevailing perceptions of young Black men are discussed.

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## Introduction

Social categories have a profound influence on nearly every aspect of human cognition and behavior. People readily and effortlessly categorize others and make use of relevant stereotypes (albeit often times unconsciously) to guide subsequent judgments and behavior (Brewer, 1988; Fiske & Neuberg, 1990; Rodin, 1987). According to recent socio-functional perspectives on social perception, moreover, stereotypes provide essential information regarding where to devote cognitive resources, especially when those resources are limited or otherwise restricted (Ackerman et al., 2006; Kenrick, Delton, Robertson, Becker, & Neuberg, in press). According to this view, stimuli that have clear functional implications for social perceivers (e.g., those pertinent to reproduction and survival) are given priority for cognitive processing. For instance, pictures of threatening animals (e.g., snakes) have been shown to capture attention relative to pictures of more benign objects (Öhman, Flykt, & Esteves, 2001). In the present investigation, we examined the extent to which young Black men—a social category stereotypically associated with physical threat—are similarly afforded preferential attention. In other words, have young Black men become so readily associated with threat that they capture attention?

## Black men and threat

There is overwhelming evidence that young Black men are stereotyped as violent, criminal, and dangerous. Indeed, research suggests that Black men are associated with threat both implicitly (Maner et al., 2005; Payne, 2001) as well as explicitly (Cottrell & Neuberg, 2005). Because they are so readily appraised as threatening, furthermore, Black men are more likely to be shot erroneously (i.e., when holding benign objects rather than weapons; Correll, Urland, & Ito, 2006), and are often (mis)perceived, suspected, automatically evaluated, and misremembered as aggressors (Bargh, Chen, & Burrows, 1996; Eberhardt, Goff, Purdie, & Davies, 2004; Graham & Lowery, 2004).

The findings of recent research employing cognitive neuroscience methodology similarly suggest that there is a pervasive connection between Black men and threat in the minds (and brains) of most social perceivers. This work has found differential activity in the amygdala—a brain region selectively responsive to perceived threat (Davis, 1992; Whalen, 1998)—in response to Black, compared with White, male targets (Hart et al., 2000; Wheeler & Fiske, 2005), especially among White individuals with relatively high levels of implicit racial attitude bias (Cunningham et al., 2004; Phelps et al., 2000). These differential patterns of activity in the amygdala are thought to reflect relatively automatic threat responses to Black male targets. Considered in tandem with the behavioral research reviewed previously, this work suggests that Black men are rapidly and readily appraised as threatening.

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### Threat and selective attention

Recall that the purpose of the present work was to investigate whether the association between Black men and threat would result in biased patterns of selective attention, such that Black male targets would capture the attention of White social perceivers more than White male targets. As alluded to previously, a plethora of research has documented the fact that biologically threatening stimuli such as snakes and spiders are attention “grabbing” (see Öhman & Mineka, 2001 for a review). But, social threats can also engage attention preferentially (e.g., Fox, Russo, & Dutton, 2002). For instance, angry facial expressions are often processed faster and more efficiently than happy or neutral faces (Cooper & Langton, 2006; Hansen & Hansen, 1988). Similarly, women who are insecure in their romantic relationships display a robust attentional bias toward highly attractive female, but not male, targets, presumably because highly attractive women are perceived to be potential competitive threats (Maner, Gailliot, & DeWall, 2007). To the extent that young Black men are appraised as threatening, this work predicts that they too will capture attention.

Indeed, there is preliminary evidence in the social psychological literature consistent with this hypothesis. Ito and her colleagues (Correll et al., 2006; Ito & Urland, 2003; Ito & Urland, 2005) have conducted a series of experiments examining event-related brain potentials (ERPs) in response to Black and White men and women. For instance, Ito and Urland (2005, E1) exposed largely White participants to pictures of Black and White males and recorded ERP activity while they either made race-irrelevant judgments (Phase 1) or engaged in an explicit racial categorization task (Phase 2). Results revealed that Black male targets evoked a larger positive-going ERP component, occurring approximately 200-ms post-stimulus (P200), which has been found to respond differentially to threatening images such as fierce dogs. Differential P200 activity to Black faces was especially pronounced when participants were engaged in the explicit racial categorization task; and, subsequent research revealed that the magnitude of participants’ P200 difference predicted a tendency to shoot unarmed Black male targets more than unarmed White male targets (Correll et al., 2006). In other words, consistent with the predictions of the present work, Ito and colleagues’ studies suggest that Black men may indeed capture attention.

Although suggestive, it is important to note that Ito and colleagues’ studies were each conducted in a context that made either race or danger salient. For instance, in several of the studies, the target face on which the ERP was time-locked was embedded in a series of trials of either all same race or all different race faces, increasing the salience of race as a factor under consideration (see Ito & Urland, 2003; Ito & Urland, 2005). In other work, participants were engaged in Correll and colleagues’ shooter-bias task (Correll et al., 2006) wherein armed and unarmed Black and White male targets are presented and participants are required to shoot the armed targets. In other words, the task itself provides the opportunity to associate Black men (and armed targets) with danger. Given these methodological considerations, it remains unclear whether the association between young Black men and danger is robust enough to bias early components of attention in a context in which neither race nor danger is made salient. The present work sought to examine this question.

### Present research

The question motivating the present research was as follows: has the stereotypical association between young Black men and danger become so robust that photographs of Black men are attentionally privileged, similar to other threatening stimuli (e.g., spiders, snakes, angry faces)? Although the nature of the threat

posed by Black men is less biologically relevant than snakes and spiders, similar to angry facial expressions, the robust stereotypical association between Black men and physical threat may result in a surprising tendency for White social perceivers to attend to Black targets more than to White targets. We tested this idea in the following two studies.

### Study 1

Study 1 sought to provide initial evidence that young Black men capture the attention of White social perceivers relative to young White men. To that end, we employed the dot-probe detection paradigm, which has been used extensively by researchers in clinical psychology to examine selective attention to psychologically relevant threats (MacLeod, Mathews, & Tata, 1986). In the dot-probe task, participants must detect the location of a probe that is initially hidden from view behind one of two stimuli that are simultaneously presented on a computer screen, but subsequently revealed when the two stimuli disappear. A short response latency to detect the probe suggests that participants’ attention had been oriented, albeit sometimes unconsciously, to the stimulus that previously obscured it. By contrast, a relatively long response latency suggests that participants’ attention had been oriented to the stimulus that had not obscured the probe.

The relevant stimuli in our task were facial photographs of young Black and White men. Furthermore, in order to reduce the salience of race as well as to preclude the engagement of cognitive resources to re-direct attention (for discussions of these issues, see Cunningham et al., 2004), we presented the facial stimuli for only 33-ms. Specifically, on each critical trial one Black and one White face were presented simultaneously in the two stimulus locations followed by a backward mask, after which the dot appeared in one of the locations. Consequently, shorter response latencies to detect the probe when it was initially obscured by a Black male face, rather than a White male face, suggest a tendency to orient attention to Black male faces. That is, faster responses to detect the dot when it was obscured by a Black, compared with a White, face reflects a pro-Black attentional bias. Based on the research reviewed previously, we predicted that White participants would selectively attend to Black, rather than White, male faces; that is, they were expected to reveal a pro-Black attentional bias.

### Methods

#### Participants

Twenty-four White college students ( $f = 13$ ) participated in the study in exchange for course credit.

#### Materials

**Face stimuli.** The face stimuli consisted of 12 pictures of White men and 12 pictures of Black men before a neutral gray background. All pictures were frontal views of the face, neck, and shoulders and were matched for age (approximately late teens to mid-twenties) and visual characteristics (e.g., brightness). Ten White undergraduates from the same population as the study participants rated how threatening, attractive, and familiar the faces were on 7-pt. Likert scales. Although Black faces were rated as more threatening than White faces ( $M$ 's = 2.58 & 2.03;  $F = 5.5$ ,  $p < .05$ ),<sup>1</sup> the Black and White faces did not differ in familiarity or attractiveness ( $F$ 's = 1.29 & .04, respectively).

<sup>1</sup> Mean threat ratings were rather low, consistent with the general tendency to avoid negative race-related judgments on explicit measures. All analyses were conducted with picture as the unit of analysis to ascertain race-related differences among the stimulus set.

**Dot-probe task.** The dot-probe task was programmed in the Direct RT software package (Empirisoft Corporation, NY) on Dell PC computers. Each trial consisted of the following sequence: (1) a fixation point was displayed for 1–3 s; (2) two faces were displayed at 6° of either side of fixation for 33-ms; (3) the faces were replaced with masks for 420-ms; and (4) a small gray dot appeared in the center of the location where one of the two faces had previously appeared. The dot remained on the screen until the participant made a response indicating the location of the dot by pressing either the corresponding “left” or “right” computer keyboard key.

Participants first completed two practice trials in which no faces appeared; instead, the word NOISE appeared on the left and right side of fixation, after which a dot appeared in one of the locations. They then completed 64 critical trials in which one Black and one White face were presented that were embedded in an equivalent number of filler trials in which either two White or two Black faces were presented. Dot racial location (previously White or Black face location) and dot position (right or left of fixation) were also randomized across trials. There were two experimental blocks, each consisting of 32 critical (Black vs. White) and 32 filler trials, for a total of 128 experimental trials.

Reaction time to detect the location of the dot served as our primary dependent variable. Shorter dot-detection latencies are thought to indicate that participants were already orienting or attending to the dot’s location prior to its appearance, presumably due to the stimulus face that had previously appeared in the same location. Following the rationale of the dot-probe task, the relative ease to detect the dot when it appeared at the Black, compared with the White, target location is indicative of an attentional bias for Black faces.

#### Procedure

Participants were greeted and escorted to a laboratory room by a White, female experimenter. After providing informed consent, participants were told that the purpose of the study was to assess the effect of “visual noise” on attention. They were asked to read and follow the instructions on the computer screen, which explained that they should indicate the location of the dot as quickly and accurately as possible. All responses and latencies were recorded by the computer. After, participants were debriefed, thanked, and credited for their participation.

#### Results and discussion

Response latencies above 1500-ms were deleted from the dataset, as were all incorrect responses, resulting in the removal of 0.5% of the data. After, response latencies >3 standard deviations above the mean (>750-ms) were replaced with 750-ms and latencies below 100-ms were replaced with 100-ms. This resulted in the replacement of 1.5% of the remaining data. The raw reaction times were then subjected to logarithmic transformation to conform to the normality assumptions of subsequent significance tests; however, the untransformed means are presented in the text and figures for ease of interpretability.

Preliminary analyses revealed that neither participant sex nor dot presentation side (left or right of fixation) resulted in reliable main or interaction effects; the data were collapsed across these factors. To examine our predictions, we first subjected participants’ mean log-transformed response latencies to a 2 (dot racial location: Black vs. White) × 2 (experimental block: first vs. second) within-subjects ANOVA. The means are presented in Table 1. Results revealed a reliable main effect of block, such that participants tended to detect the dot faster during the second half of the experiment than the first,  $F(1,23) = 6.00, p < .03$ . This main effect was qualified, however, by a marginally significant interaction with dot racial location,  $F(1,23) = 3.06, p = .09$ . Participants tended to

**Table 1**

Mean dot-detection latencies for the first and second experimental blocks

	First block	Second block
Dot location		
Black target	431.5(65)	419.9(52)
White target	441.9(69)	418.1(49)

Note: Latencies are in raw milliseconds units. Standard deviations are in parentheses.

detect the dot faster when it appeared in the Black face location compared with the White face location, but only during the first half of the task. Indeed, consistent with predictions, the pro-Black attentional bias<sup>2</sup> in the first half of the task was statistically reliable,  $M_{diff} = 10.4; t(23) = 2.11, p = .04$ . By contrast, there were no differences in dot-detection latencies between the White and Black location trials during the second half of the task,  $t(23) = .33$ .

Taken together, these data provide preliminary evidence that White perceivers initially attend to Black rather than White male targets that are presented without their awareness.<sup>3</sup> The null result for the second half of the dot-probe task suggests, however, that the effect may decay relatively quickly. One possibility for why we did not find a pro-Black attentional bias in the second block is because participants habituated to the faces. This is especially likely given that the same 12 Black and 12 White faces were repeated across the 128 trials. To the extent that the bias observed in the first half of the task reveals a threat response to Black targets, as participants habituate to the faces, the threat reaction should dissipate as well. In other words, after repeated presentation, the threat value of the Black male targets may have eroded, and, thus, so too did participants’ attentional bias.

Nevertheless, participants did reveal a pro-Black attentional bias in the first half of the task (32 critical trials), consistent with our predictions and with the mountain of evidence that young Black men are stereotypically associated with violence and danger (Eberhardt et al., 2004; Payne, 2001). Furthermore, the findings suggest that in addition to affording stereotype-consistent processing on tasks that explicitly tap or prime crime, race, and/or danger, Black male targets may be privileged for attentional resources, similar to more evolutionarily significant threatening stimuli (e.g., snakes, spiders, angry faces; Öhman et al., 2001), at least at low levels of awareness, and in early components of attention (Ito & Urland, 2003; Ito & Urland, 2005). Because we only observed our predicted effect in the first half of our paradigm, however, we thought it important to replicate the attentional bias finding in a new sample of participants with a new set of target photographs. Furthermore, to bolster our interpretation that the attentional bias effect is mediated by threat perceptions, in Study 2 we examined the extent to which we could attenuate the effect by reducing the threat value of the Black male targets. To the extent that the results of Study 1 reflect early attentional orienting to perceived threat, reducing the threat signal communicated by the faces should undermine the attentional bias.

#### Study 2

Study 1 provided initial evidence that Black male faces may indeed capture the attention of White perceivers. We have suggested

<sup>2</sup> Pro-Black attentional bias scores were calculated by subtracting each participant’s mean transformed latency for the Black location trials from his/her mean transformed latency for the White location trials.

<sup>3</sup> Because the faces were presented briefly (33-ms), at the edge of parafoveal range, and then immediately masked, it is likely that participants’ level of awareness was extremely low (see Cooper & Langton, 2006).

that this pro-Black attentional bias arises because young Black men signal the potential for threat in the environment, consistent with research showing that individuals selectively attend to threatening stimuli (Öhman et al., 2001). If threat signal value does indeed mediate the attentional bias, then it is reasonable to predict that other more evolutionarily important cues may act in concert with race (and gender) to modulate, and perhaps even eliminate, it. The purpose of Study 2 was to investigate this possibility.

One relevant, evolutionary cue is eye-gaze direction. Detection of eye-gaze direction is thought to be a biologically prepared ability that provides important information regarding the emotions, intentions, and mental states of others (Baron-Cohen, 1995; Emery, 2000; Hood, Willen, & Driver, 1998). Almost without exception, the most important social targets are those with whom direct eye contact has been established. Direct eye-gaze, furthermore, serves as a signal that targets are motivated to approach, communicating a range of intentions, including romantic interest (Mason, Tatkov, & Macrae, 2005), but also hostility and impending peril (Argyle & Cook, 1976). In non-human primates and lower animals alike, furthermore, steady direct gaze signals dominance and threat, engendering freezing and avoidance responses when displayed by predators (Gallup, 1973; Keating & Keating, 1982); averted gaze, on the other hand, signals submission (Altmann, 1967), engendering hiding or flight responses when displayed by predators (presumably because the predator has not yet caught sight of you!).

Given the biological relevance of eye-gaze, it makes sense that the amygdala—which is thought to mediate vigilance in the face of environmental threat (Whalen, 1998)—is sensitive to gaze direction (George, Driver, & Dolan, 2001). Direct eye-gaze, furthermore, may be especially significant to perceivers when communicated by a relevant out-group member. Accordingly, research has found that direct eye-gaze facilitates social categorization (Macrae, Hood, Milne, Rowe, & Mason, 2002). Taken together, it is not surprising that exposure to Black male targets displaying direct eye-gaze (as used exclusively in previous research) results in heightened amygdala activity (e.g., Hart et al., 2000), and the early engagement of attention revealed in Study 1. In other words, social cues that are associated with threat, such as race and gender group membership, may combine with eye-gaze direction to signal a target's threat potential and, thus, modulate amygdala activity and patterns of selective attention accordingly.

Indeed, recent research suggests that averted eye-gaze undermines differences in both explicit threat perceptions of Black and White men, as well as differential amygdala activity (Richeson, Todd, Trawalter, & Baird, 2008). Specifically, White perceivers rated the faces of Black men with averted eye-gaze as less threatening than the faces of Black men with direct eye-gaze; and they rated Black and White targets with averted eye-gaze as equally (non)threatening. A subsequent study employing fMRI methodology found an analogous pattern of results—White individuals exhibited heightened amygdala activity in response to Black male faces with direct eye-gaze compared with White male faces with direct gaze, but there were no differences in amygdala activity in response to Black and White male faces with averted eye-gaze. Taken together, these results suggest that averted eye-gaze communicates a lower degree of social threat than direct eye-gaze.

In light of this work, Study 2 investigated whether eye-gaze direction moderates the pattern of selective attention to Black, rather than White, male faces revealed in Study 1. Given the higher threat value associated with direct eye-gaze, especially for out-group targets, we predicted that White participants would selectively attend to Black, rather than White, male faces with direct eye-gaze, replicating Study 1. In contrast, because averted eye-gaze is associated with submission rather than threat, we predicted that White participants would *not* selectively attend to Black male faces with averted gaze.

## Methods

### Participants

Twenty-four White college ( $f = 10$ ) students participated in the study in exchange for course credit.

### Materials

*Face stimuli.* The facial stimuli consisted of 12 pictures of White men and 12 pictures of Black men before a neutral gray background. For half of the faces, eye-gaze direction was direct and for the remaining half, eye-gaze direction was averted. All pictures were frontal views of the face, neck, and shoulders. Similar to in Study 1, the photographs were matched for age, attractiveness, and visual characteristics. Furthermore, we examined the explicit threat perceptions of the faces with a sample of 20 White perceivers (see also Richeson et al., 2008). Results revealed that the Black male faces with direct eye-gaze were rated as more threatening than the White male faces with direct eye-gaze ( $M's = 3.43$  &  $2.58$ ;  $F = 6.18$ ,  $p = .02$ ), but threat ratings of Black and White faces with averted eye-gaze did not differ ( $M's = 2.54$  &  $2.63$ ;  $F = .03$ ).<sup>4</sup>

*Dot-probe task.* The dot-probe task was largely identical to that described in Study 1. Dot racial location (White or Black target location), target eye-gaze direction (direct or averted), and dot position (right or left of fixation) were randomized across trials. Based on the findings of Study 1, we shortened the present task in order to avoid habituation and/or practice effects. Specifically, in the new task Black and White, direct and averted-gaze faces were presented in 8 experimental blocks, each consisting of 12 trials. Furthermore, similar to in Study 1, 6 of the trials in each block were the critical trials in which 1 Black and 1 White face were presented (both bearing either direct or averted gaze); the other 6 were the filler trials in which either 2 Black or 2 White faces were presented. Hence, the dot-probe task in Study 2 consisted of 48 critical trials (24 direct gaze & 24 averted gaze) embedded in 48 filler trials.

Again, reaction time to detect the location of the dot served as our primary metric of attention, with shorter reaction times indicating participants' visual orientation to the dot's location, presumably due to the stimulus face that had previously been in the same location.

### Procedure

Procedures were identical to those reported for Study 1.

### Results and discussion

Response latencies were trimmed and transformed as in Study 1. This resulted in the removal or replacement of approximately 3% of the data. Neither participant sex, nor dot presentation side, nor experimental block resulted in reliable main or interaction effects; hence, the data were collapsed across these factors.

To examine our predictions, we first subjected participants' mean log-transformed dot-detection latencies to a 2 (dot racial location: Black vs. White face)  $\times$  2 (gaze direction: direct vs. averted) ANOVA. Results revealed neither reliable main effects of dot racial location,  $F(1,23) = 1.08$ ,  $p = .31$ , nor of gaze direction,  $F(1,23) = .95$ ,  $p = .34$ . Consistent with predictions, however, the dot racial location  $\times$  gaze direction interaction was significant,  $F(1,23) = 4.91$ ,  $p = .04$ . Mean dot-detection latencies are presented in Table 2. To examine participants' selective attention more closely, however, we computed pro-Black attentional bias scores,

<sup>4</sup> In addition to threat, we examined whether the faces looked artificial or odd, given the manipulation of eye-gaze, which could also affect attention. Results revealed no differences in how odd faces with direct compared with averted eye-gaze appeared, irrespective of target race (all  $F's < 1.3$ ).

**Table 2**  
Mean dot-detection latencies by dot location and stimulus gaze direction

	Direct gaze	Averted gaze
<i>Dot location</i>		
Black target	391.7(66)	404.9(74)
White target	404.4(76)	398.3(62)

Note: Latencies are in raw milliseconds units. Standard deviations are in parentheses.

reflecting differential response latencies for the Black dot location compared with White dot location trials, separately for faces with direct and averted eye-gaze. Positive bias scores reflect pro-Black attentional bias.

As shown in Fig. 1, participants revealed a significant attentional bias for Black faces with direct eye-gaze,  $t(23) = 2.62$ ,  $p = .01$ , but not for Black faces with averted gaze,  $t(23) = -.68$ ,  $p = .50$ . Indeed, the attentional bias pattern was in the opposite direction. As suggested by the pattern of means in Table 2, these effects were driven exclusively by the privileged attention afforded to Black faces with direct eye-gaze.<sup>5</sup> Consistent with predictions, in other words, participants attended to Black male faces when the threat signal was high (i.e., faces with direct gaze), but not when it was low (i.e., faces with averted gaze).

## General discussion

A wealth of research has demonstrated that people selectively attend to threat-relevant stimuli (Öhman & Mineka, 2001). Consistent with this work, in two studies we found that White perceivers selectively attended to the faces of young Black men—a social group stereotypically associated with threat and danger. This race-based difference in selective attention was eliminated, however, when the target faces displayed averted eye-gaze (Study 2), suggesting that social category memberships and eye-gaze cues worked jointly to signal target threat potential to perceivers, who responded by directing their attention (albeit nonconsciously) to the presumed source of the threat.

The results of the present studies complement and extend an emerging line of research examining differences in selective attention as a function of social category memberships<sup>6</sup> (e.g., Correll et al., 2006; Eberhardt et al., 2004; Ito & Urland, 2003, 2005). As reviewed previously, the research conducted by Ito and colleagues had largely found evidence for the early attentional engagement of Black male targets, relative to White men, Black women, and White women. Much of this research, however, employed methods in which the race (and gender) of the targets and/or cues associated with dan-

<sup>5</sup> Although initial inspection of the means suggests that White faces with averted eye-gaze may have been attended to less than White faces with direct gaze, analyses suggested otherwise ( $t = -0.74$ ,  $p > .4$ ). Furthermore, participants appeared to orient toward Black direct-gaze faces more than Black averted-gaze faces ( $t = 2.28$ ,  $p < .05$ ), and marginally more than White averted-gaze faces ( $t = 1.44$ ,  $p = .16$ ). Because White and Black faces with averted gaze were never actually paired in the dot-probe task with White direct-gaze faces or Black direct-gaze faces, however, these results should be interpreted with caution.

<sup>6</sup> It is important to note that we are not the first to examine race-related attentional biases with the dot-probe paradigm. Eberhardt et al. (2004) and Goff, Eberhardt, Williams, and Jackson (2008) employed a 1-trial dot-probe task to investigate whether individuals who are primed with crime-related objects or ape imagery, respectively tend to orient to Black, rather than White, male faces. Surprisingly, participants in the no-prime, control conditions in these studies tended to orient toward White, rather than Black, targets. Because the faces were presented supraliminally (450-ms), however, participants may have engaged in controlled processing to direct their attention away from the Black faces and toward the White faces, masking the initial attentional orienting to the Black faces. Consistent with this possibility, a number of studies have found evidence that the early attentional engagement of threatening stimuli is often followed by attentional avoidance (e.g., Cooper & Langton, 2006; Ito & Urland, 2003, 2005; Richeson & Trawalter, 2008).

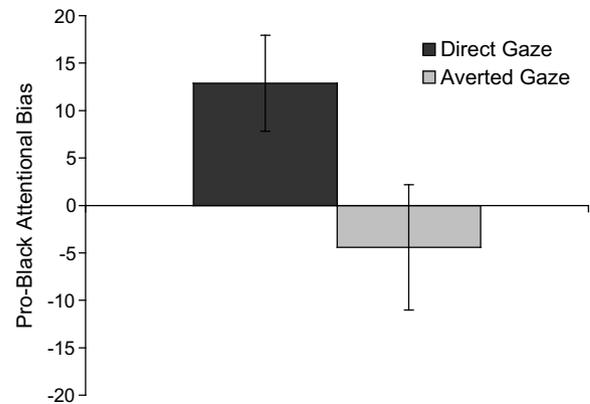


Fig. 1. Pro-Black attentional bias as a function of target eye-gaze direction. Error bars display standard error of the mean.

ger and crime (e.g., guns) were made salient, by either the task instructions or the context in which the stimulus targets were presented. Using a paradigm that neither required nor allowed for the explicit processing of race, gender, or danger, we found compelling convergent evidence that young Black men do indeed capture attention, similar to other perceived threats.

The present findings also extend the results of previous work in that we considered how a competing, evolutionarily-relevant threat cue might moderate race-based differences in selective attention. Indeed, the race difference in selective attention was eliminated when the targets were not looking directly at perceivers (Study 2). This finding attests to the importance of eye-gaze for inferring others' emotions, mental states, and intentions (Baron-Cohen, 1995; Emery, 2000). Furthermore, the findings demonstrate the value of examining the interactive influences of information gleaned from the bottom-up processing of compound stimulus cues (e.g., race, gender, and eye-gaze) and top-down processing (e.g., stereotypic expectancies) on threat appraisals and social perception more generally (e.g., see Goff et al., 2008).

Despite the theoretical convergence with the aforementioned previous research, it is important to note that the present data are limited in a few important ways. First, we only tested White perceivers and, thus, cannot discern the extent to which Black perceivers and/or members of other ethnic/racial groups (e.g., Latinos, Asians) may reveal similar patterns of selective attention regarding young Black vs. White male targets. Second, although we posit that the effects that emerged reflect the robust, stereotypical association between young Black men and threat, our data are agnostic regarding the extent to which social targets from other combinations of race, gender, and age groups may elicit similar patterns of privileged attention. Indeed, we contend that any group that is associated with threat or danger should similarly be afforded privileged attention. Future research should explore these processes with nonWhite perceivers and nonBlack targets.

## Concluding thoughts

The stereotype of young Black men as criminal is deeply embedded in the collective American consciousness (and unconscious). Indeed, a recent set of audit studies of racial discrimination in low-wage labor markets (e.g., Pager, 2003) revealed that a Black male applicant without a criminal record fares no better at acquiring a job than a similarly skilled White applicant who was recently released from prison! The present findings offer the sobering suggestion that the association between young Black men and danger has become so robust and ingrained in the minds of social perceivers that it affects early components of attention.

We believe that this work underscores the need to re-think public policies, such as the disparate punishments associated with crack vs. powder cocaine possession, that have contributed to the mass incarceration of young Black men, which, in turn, serves to reinforce if not also to create and rationalize, the Black male = threat stereotype (Sidanius, Levin, & Pratto, 1998). The reformation of such racially-yoked policies may be the only way to counter, and perhaps even change, this prevailing stereotype that is so deleterious to the health, wealth, and well-being of young Black American men.

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