Does Discrimination Breed Mistrust? Examining the Role of Mediated and Non-Mediated
Discrimination Experiences in Medical Mistrust

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Abstract

Medical mistrust is associated with a decreased likelihood of engaging in various health behaviors, including health utilization and preventive screening. Despite calls for research to address medical mistrust, few studies have explicitly delved into antecedents to medical mistrust. The current study a) examines the relationship between discrimination experiences and medical mistrust and b) experimentally tests the influence of mediated vicarious discrimination on reported levels of medical mistrust. Participants ($N = 198$) were randomly assigned to view news stories in one of four experimental conditions: no exposure, no discrimination control, implicit racial discrimination, and explicit racial discrimination. Results indicated prior personal and vicarious discrimination experiences were related to medical mistrust. Furthermore, exposure to mediated discrimination influenced medical mistrust in different ways for Black and White participants. Among Black participants, medical mistrust was significantly higher for those exposed to the implicit racial discrimination condition than the control condition. Marginal differences were found for White participants such that those exposed to both explicit and implicit racial discrimination conditions reported higher medical mistrust than those exposed to the control condition. Our findings are discussed in terms of the theoretical and practical implications for health communication scholars seeking to examine and influence health behaviors.

Keywords: medical mistrust, mediated communication, news, discrimination

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Medical mistrust, distrust of the motives of medical personnel and institutions (Omodei & McLennan, 2000), is associated with a decreased likelihood to engage in a variety of health behaviors. A recent systematic review found that medical mistrust has been included in studies across a wide range of topics from cancer to blood and organ donation to medical research (Williamson & Bigman, 2018). Importantly, individuals reporting high levels of medical mistrust also report being less likely to engage in a wide range of behaviors including being screened for prostate, breast, and colorectal cancer (Bynum, Davis, Green, & Katz, 2012; Purnell et al., 2010; Shelton et al., 2010; Thompson et al., 2004), being tested for sexually transmitted infections (Kolar et al., 2015), and seeking, receiving, and adhering to recommended treatments (Bickell, Weidmann, Fei, Lin, & Leventhal, 2009; Kalichman et al., 2016; Owens, Riggle, & Rostosky, 2007). Thus, medical mistrust represents a barrier that affects behaviors across the spectrum of health-related behaviors. Due to the pervasiveness of medical mistrust, there have been calls to address this barrier (e.g., Scharff et al., 2010).

Successful intervention requires that health scholars understand the antecedents of medical mistrust. Unfortunately, there is a dearth of literature explicitly examining the antecedents of medical mistrust. There have been, however, a few studies that allude to the possibility that discrimination plays a role in the formation of medical mistrust, but this work has solely examined individuals' own experiences and ignored vicarious experiences of discrimination. We argue that based on social cognitive theory and priming, vicarious racial discrimination can influence medical mistrust. The current study a) examines the relationship between vicarious discrimination and medical mistrust and b) the effect of news stories depicting discrimination (i.e., vicarious mediated discrimination) on medical mistrust. In doing so, we

move the literature forward in two important ways. First, we begin to examine how vicarious

discrimination experiences influence medical mistrust. Second, we explore the effects of

mediated communication on medical mistrust. Below, we discuss the relationships between

racial discrimination, vicarious experiences, and medical mistrust.

The Role of Racial Discrimination in Medical Mistrust

Much of the literature on medical mistrust has focused on the link between medical

mistrust and health outcomes, as well as factors that may mitigate the effects of medical mistrust

on health outcomes. While important, this neglects what contributes to medical mistrust in the

first place. Given the connection between medical mistrust and racial health disparities (Nelson,

Stith, & Smedley, 2002; Office of Disease Prevention and Health Promotion, 2017), it is

important to understand what influences medical mistrust. This may be particularly important for

minority groups who harbor higher levels of medical mistrust than their White counterparts

(Guadagnolo et al., 2009; Halbert et al., 2009; Meng, McLaughlin, Pariera, & Murphy, 2016;

Thompson Valdimarsdottir, Jandorf, & Redd, 2003).

One possible antecedent to medical mistrust is discrimination. Durant et al. (2011) found

that perceived racial discrimination *in healthcare* was related to medical mistrust. However, the

relationship between perceived racial discrimination and medical mistrust extends to general

racial discrimination experiences (i.e., discrimination outside of healthcare). In a study using a

measure of discrimination with no items specific to healthcare, Hammond (2010) found a

significant relationship between perceived racial discrimination and medical mistrust. This

suggests that discrimination in other contexts, *outside of healthcare*, can influence medical

mistrust. We therefore hypothesized:

H1: Prior personal discrimination experiences will be associated with greater medical mistrust.

In the Durant et al. (2011) and Hammond (2010) studies, the conceptualization of discrimination experiences focused on an individual's own experiences. To date, the quantitative literature on medical mistrust and discrimination has not examined the role of vicarious discrimination experiences on medical mistrust. However, based on social cognitive theory, vicarious experiences of discrimination (e.g., others' experiences) may also influence medical mistrust.

Social cognitive theory (SCT) provides an explanation for how learning about the environment occurs (Bandura, 2009). According to SCT, individuals learn not just by direct experiences, but also through vicarious learning; an individual can learn from others' experiences and the consequences of those actions. This observational learning occurs through symbolic modeling. Part of this process entails turning modeled events into rules and conceptions (Bandura, 2009). Thus, individuals need not experience or encounter discrimination themselves to decide there is discrimination and act accordingly. Witnessing or learning of others' experiences with discrimination can also affect perceptions; vicariously experiencing discrimination causes individuals to realize that they, themselves, are vulnerable to racism (Truong, Museus, & McGuire, 2016). Therefore, we hypothesized:

H2: Prior vicarious discrimination experiences will be associated with greater medical mistrust.

Further, these vicarious experiences can specifically occur through media exposure (Bandura, 2009). Mediated depictions of discrimination (i.e., a news story of another individual experiencing discrimination) may create beliefs for the viewer that they apply to their own lives.

Recent qualitative work supports this assertion; an examination of the role of the communication environment on medical mistrust beliefs found that Black participants cited media as influencing their medical mistrust beliefs concerning organ donation (Williamson, Bigman, & Quick, 2018). While participants mentioned entertainment media (e.g., movies), medical mistrust was also attributed to news media. Specifically, participants recounted seeing news stories about others' experiences with the organ donation system as reasons for their medical mistrust beliefs (Williamson et al., 2018). This suggests vicarious mediated exposure can influence medical mistrust. Further, exposure to mediated discrimination in one context may prime thoughts about discrimination more broadly, including the medical system. For example, if an individual is presented with a story about discrimination by police, it may activate a mental node about "discrimination," which could be linked to the medical system (Domke, Shah, & Wackman, 1998). As a result, anyone whose mental schema places linkages between discrimination and medical mistrust may be influenced by exposure to mediated discriminatory experiences. Given that individuals across racial groups are aware of events that suggest discriminatory practices against minorities groups (i.e., Tuskegee Syphilis Study; Brandon et al., 2005), these linkages could exist across racial groups. Therefore, we hypothesize:

> H3: Exposure to news stories that highlight explicit racial discrimination will result in
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> higher levels of medical mistrust than a control message, or no exposure.

However, when examining the impact of exposure to discrimination news stories the framing of those news stories should also be considered. More specifically, the use of implicit versus explicit racial cues. Messages using implicit racial cues (versus explicit racial cues) omit racial nouns or adjectives enabling race to seem peripheral (Mendelberg, 2001). According to Mendelberg (2001, 2008), these messages work because words can have racial associations even

if they do not explicitly mention race. It is these implicit frames that are used in colorblind messaging (Omi & Winant, 2014), which is likely to be present in the message environment given claims to a post-racial society. Empirical studies have shown that implicit and explicit racial frames can have differing effects on outcomes (Gilliam Jr & Iyengar, 2000; Hurwitz & Peffley, 2005). Thus, to understand the effects of exposure to news stories about discrimination on medical mistrust, both explicit and implicit racial frames were tested. Therefore, we hypothesize:

> H4: Exposure to news stories that highlight implicit racial discrimination will result in higher levels of medical mistrust than a control message, or no exposure.

Racial Discrimination, Medical Mistrust, and Racial Identity

Racism is a key factor when considering racial health disparities (Williams & Mohammed, 2013) and racial discrimination has been put forth as a reason for racial differences in medical mistrust (Adams & Simoni, 2016; Armstrong et al., 2012; McGary, 1999). Although discussions surrounding race and medical mistrust typically highlight historical issues of racism and discrimination, such issues persist and are not only in the distant past (Skinner, 2014; Washington, 2006). To the extent that Black Americans' experiences with racial discrimination is a key factor in medical mistrust, the relationship between perceived racial discrimination and medical mistrust should be apparent for Black Americans in particular. Further, some literature on the application of SCT to media influence (Bandura, 2001; Pajares, Prestin, Chen, & Nabi, 2009) suggests that vicarious learning is facilitated by similarity between the model and audience members, indicating that racial cues in the story could have different effects across racial groups. Exposure to events that demonstrate continued discrimination toward Black Americans should

therefore be particularly influential for Black Americans' medical mistrust. Thus, we

hypothesize:

> H5: Exposure to news that highlights explicit and implicit racial discrimination will result
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> in higher medical mistrust than the control and no exposure conditions for Blacks.

As other racial/ethnic groups also face and perceive discrimination that may influence medical

mistrust and race is only one dimension that can affect perceived similarity between models and

audiences (Pajares et al., 2009), we also ask:

> RQ1: Does exposure to news that highlights explicit and implicit racial discrimination
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> result in higher medical mistrust than the control and no exposure condition for members
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> of other racial and ethnic groups?

Method

Participants and Design

Undergraduate students (N=205) were recruited at a large midwestern university. Three

participants who were not exposed to the stimuli and four students who had previously

completed the survey were excluded from further analysis resulting in a final sample size of 198

participants. This included 85 participants who identified as White and 63 participants who

identified as Black; all remaining participants identified as another race (e.g., Hispanic/Latinx,

Asian) or identified as multiracial. Due to small subsamples, all other racial groups were

collapsed and classified as "Other" (n = 50). This category was retained for analysis as it

represented non-Black racial/ethnic minorities. The sample was predominantly female (70.7%)

with an average age of 20.24 years (*SD*=1.60).

Experimental Procedures

Participants completed an experimental survey on Qualtrics, an online survey platform. Participants were told they were participating in a study about social media and news. Each participant was randomly assigned to one of four experimental conditions: no exposure, no discrimination control, implicit racial discrimination, and explicit racial discrimination; randomization was stratified by race. Participants assigned to an exposure condition were shown a mock news feed containing four news stories; these four stories represented different topics within a given condition. Each article was represented by a title, summary, and stock photograph. Participants were instructed to choose which one of the four articles they would like to read based on the titles and summaries. After reading the full story, participants completed measures and were then debriefed.

Stimuli

News stories were created based on actual news reports. Four topics were used: lead poisoning, zero-tolerance policies in school, voter ID laws, and policing for profit. For articles in the discrimination conditions, Black Americans were presented as being subject to negative outcomes due to policies related to the given topic. In line with previous research (e.g., White, 2007), class-based discrimination served as the implicit race cue.

Measures

This study was part of a larger data collection effort investigating the effects of mediated messages. For the current study, medical mistrust, prior personal experiences with discrimination, and prior vicarious experiences were used in the main analysis, while ethnic identity and linked fate were used in post-hoc analyses.[1]

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[1] Ethnic identity was assessed using the six item revised Multigroup Ethnic Identity Measure (MEIM-R; Phinney & Ong, 2007). Participants rated their level of agreement from 1 (strongly disagree) to 5 (strongly agree). Items formed a reliable measure for Black (alpha = .89), "Other"

Medical mistrust. Medical mistrust was measured using the Group-Based Medical Mistrust Scale (GBMMS; Thompson et al., 2004). The GBMMS is a 12-item measure that asks participants whether people of their race/ethnicity should be distrustful of medical personnel. As such, it is considered a measure of race-based medical mistrust (e.g., Pellowski, Price, Allen, Eaton, & Kalichman, 2017). The scale contains items such as "People of my race/ethnicity should be suspicious of modern medicine." Participants are asked to rate their level of agreement from 1 (strongly disagree) to 5 (strongly agree). The GBMMS formed a reliable measure for the entire sample (alpha = .88) as well as for participants categorized as Black (alpha = .85), White (alpha = .80), and "Other" racial minorities (alpha = .84).

Prior discrimination experiences. Prior discrimination experiences was measured utilizing items from the racism experiences subscale of the Racism and Life Experiences Scale (RaLES; Harrell, 2000; Harrell, Merchant, & Young, 1997). The scale contains items that ask how frequently participants have experienced discrimination themselves (e.g., "a racially hostile atmosphere at your job, school, or neighborhood"), as well as others' experiences (e.g., "witnessing discrimination or prejudice directed toward someone else"). Participants are asked to rate the frequency of each experience from 0 (never) to 4 (very often). Items for both prior personal discrimination experiences (alpha = .78) and prior vicarious discrimination experiences (alpha = .87) formed reliable measures for the entire sample. For racial subgroups, the items reflecting prior personal discrimination experiences formed relatively reliable measures for Black (alpha = .76), "Other" race/ethnicity (alpha =.85), and White (alpha =.67) participants.

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race/ethnicity (alpha = .90), and White (alpha = .89) participants. Linked fate was measured using three items from Simien (2005) and Dawson (1994). Participants responses ranged from 0 (no) to 3 (a lot). Items formed a reliable for Black (alpha = .75), "Other" (alpha =.92) and White (alpha =.89) participants.

Items regarding prior vicarious discrimination experiences formed a reliable measure across

racial groups (alpha = .88, Black; alpha =.88, "Other" racial minorities; alpha = .81, White).

Results

Preliminary Analyses

To ensure the discrimination manipulation resulted in stories that participants thought

differed in discrimination content, participants were presented with two items: "The story I read

mentioned racial discrimination" and "The story I read reported on someone who experienced

racial discrimination." Participants responded on a 5-point scale from 1 (strongly disagree) to 5

(strongly agree). ANOVA results for the items showed that the manipulation was effective

($F(2,145) = 8.27$, $p < .001$ and $F(2, 144) = 7.41$, $p < .01$, respectively). For both items, the no

discrimination – control condition produced the lowest means ($M = 2.69$, $SD = 1.18$; $M = 2.62$,

$SD = 1.16$), followed by the implicit racial discrimination condition ($M = 2.98$, $SD = 1.35$; $M =$

3.00, $SD = 1.34$), and explicit racial discrimination condition ($M = 3.75$, $SD = 1.31$; $M = 3.64$, SD

= 1.30). Tukey's D showed significant differences between the control condition and explicit

racial discrimination condition, $p < .05$, as well as differences between the implicit racial

discrimination and explicit racial discrimination condition, $p < .05$.

However, when the manipulation check was analyzed by racial groups, there were only

significant differences between certain conditions. Regarding the first item, Black participants

saw no difference between conditions for mention of discrimination, while "Other" race/ethnicity

participants and White participants, viewed differences in whether stories mentioned

discrimination. For other racial minorities, there was a significant difference between the explicit

racial discrimination condition and the control condition ($p = .04$). For White participants, there

was a significant difference between the explicit racial discrimination condition and both the

implicit racial condition ($p = .02$) and the control ($p = .03$).

For the second item, whether the story reported on someone who experienced racial

discrimination, Black participants only reported differences between the implicit racial

discrimination and the control condition ($p = .05$). White participants had significant differences

between the explicit racial discrimination condition and the control condition ($p = .03$), as well as

between the explicit and implicit racial discrimination conditions ($p = .01$). Participants

identifying as other racial groups (i.e., those in the "Other" group) did not perceive significant

differences between conditions regarding whether characters in the story experienced

discrimination.

Relationship Between Medical Mistrust, Prior Personal Experiences with Discrimination,

and Prior Vicarious Experiences with Discrimination

Consistent with previous literature, medical mistrust differed by race, $F(2,189) = 45.21$, p

$< .001$, $\eta^2 = .32$. Black participants reported significantly higher levels of medical mistrust ($M =$

36.75, $SD = 8.14$) than White participants ($M = 24.67$, $SD = 7.33$), and participants of other

racial backgrounds ($M = 32.15$, $SD = .6.24$). To investigate H1 and H2, the relationship between

medical mistrust, prior personal experiences, and prior vicarious experiences with discrimination

were examined. Means and correlations for the entire sample can be found in Table 1. Medical

mistrust was positively associated with prior personal experiences with discrimination ($r = .40$, p

$< .001$), and prior vicarious experiences with discrimination ($r = .48$, $p < .001$). Thus, we found

support for H1 and H2.

Given racial differences in medical mistrust, these associations were also examined by

racial group. These results can be found in Tables 2-4. Personal experiences of discrimination

were positively related to medical mistrust for Black participants ($r = .34$, $p = .007$), "Other" race/ethnicity participants ($r = .30$, $p = .04$), and White participants ($r = .23$, $p = .03$). A similar pattern was found for vicarious experiences with discrimination. Prior vicarious experiences with discrimination was positively associated with medical mistrust for Black participants ($r = .40$, $p = .001$), "Other" race/ethnicity participants ($r = .35$, $p = .02$), and White participants ($r = .24$, $p = .03$).

Exposure to Mediated Racial Discrimination and Medical Mistrust

Omnibus ANOVAs were conducted to determine whether there were any differences in medical mistrust based on condition (H3 and H4). Across the sample, there were no differences in medical mistrust based on story exposure, $F(3, 188) = 1.56$, $p = .20$. Thus, there was not support for H3 and H4 for the full sample. However, when differences were examined by racial group (H5 and RQ1), significant differences emerged for Black participants, $F(3,57) = 4.66$, $p = .01$, $\eta^2 = .20$. Specifically, medical mistrust was significantly higher for those exposed to the story with implicit racial discrimination ($M = 42.93$, $SD = 7.31$) than the control story ($M = 33.00$, $SD = 11.06$). There were marginal differences for White participants, $F(3,80) = 2.64$, $p = .055$, $\eta^2 = .09$. An examination of planned contrasts among White participants revealed that medical mistrust was significantly higher for those exposed to stories with implicit racial discrimination ($M = 26.905$, $SD = 7.58$) and explicit racial discrimination ($M = 26.68$, $SD = 7.45$) than the control story ($M = 22.15$, $SD = 6.76$). There were no significant differences for participants of "other" racial/ethnic minority groups, $F(3,43) = .66$, $p = .58$. Means for all conditions can be found in Table 5. A chi-square test revealed there were no racial differences in randomization to conditions $\chi^2 (6, N = 198) = 2.57$, $p = .86$. In other words, the race of the participant was not

associated with the assigned condition. Thus, we found partial support for H5 and found differences for White participants, but not for participants of other racial/ethnic groups.

Discussion

Medical mistrust is a pervasive barrier that acts as a deterrent to engagement in a variety of positive health behaviors (e.g., cancer screening, organ donation; Thompson et al., 2004; Morgan, 2006). Yet, to date, little scholarship on medical mistrust has closely examined the antecedents of medical mistrust. Discrimination is posited as one antecedent of medical mistrust, but previous conceptualizations have focused on direct experiences of discrimination (i.e., personal experiences). The current study examines the relationship between vicarious racial discrimination (i.e., others' discrimination experiences, exposure to mediated racial discrimination) on medical mistrust.

Consistent with previous literature, we found that Black participants reported higher levels of medical mistrust than their White counterparts. Given the overlapping nature of racial and ethnic identity (Phinney & Ong, 2007; Smith & Silva, 2011) and linked fate (Dawson, 1994; Simien, 2005), post-hoc analyses were conducted to determine whether these constructs may be playing a role in this association. We conducted ANCOVAs to test the relationship between race and medical mistrust, controlling for ethnic identity and linked fate. Analyses found that race remained a significant predictor of medical mistrust after controlling for ethnic identity, $F(2,187) = 33.51$, $p < .001$, partial $\eta^2 = .26$. Similar results were found after controlling for linked fate, $F(2,188) = 39.45$, $p < .001$, partial $\eta^2 = .30$. This would suggest there is something about self-reported race, beyond ethnic identity and linked fate, that is related to medical mistrust.

We hypothesized that both prior personal experiences and prior vicarious experiences with discrimination would be positively related to medical mistrust. We found support for these

hypotheses; both prior personal experiences and vicarious experiences with discrimination were positively associated with medical mistrust for the entire sample. When racial groups were analyzed separately, this pattern existed for all racial/ethnic groups. Previous work has shown a connection between perceived discrimination and health outcomes for both Blacks and Whites (e.g., Casagrande, Gary, LaVeist, Gaskin, & Cooper, 2007). Our results suggest that this may not only apply to health outcomes, but also to medical mistrust. As health scholars continue to investigate medical mistrust, it will be important to include vicarious experiences of discrimination.

We also examined the effects of exposure to mediated racial discrimination on medical mistrust. Among Black participants, there were differences in medical mistrust between those exposed to stories exemplifying implicit racial discrimination and those exposed to stories in the control condition. Interestingly, Black participants who were exposed to stories explicitly mentioning racial discrimination did not report significantly different levels of medical mistrust than those exposed to the control story. This aligns with the results of our manipulation check as Black participants did not distinguish between the explicit racial discrimination and control condition on either of those items. Black participants did, however, distinguish between the implicit racial discrimination and control condition when asked to indicate whether the individual in the story *experienced* discrimination. This pattern of results could suggest that, for Black participants, the effect on medical mistrust is the result of a specific manifestation of discrimination (e.g., perceiving a discriminatory system where racial discrimination is not acknowledged). Additional work is needed to investigate why implicit, but not explicit, racial discrimination stories are viewed as discriminatory (compared to a control condition) and influence medical mistrust.

A different pattern of results emerged for White participants. Our results suggested there could be differences in medical mistrust for White participants exposed to both explicit and implicit stories of discrimination against Black individuals compared to those exposed to stories without discrimination. Given the implicit condition contained a class cue and socioeconomic status may be an important factor for Whites (Benkert, Peters, & Templin, 2019), the effects for the implicit condition align with prior research. The reason for the effects from the explicit condition are less clear. Future work should explicitly investigate the role of perceived similarity, and the sources of this similarity (e.g., race, socioeconomic status), to determine the underlying mechanisms for these effects.

Theoretical Implications

Our results build on the qualitative work conducted by Williamson et al. (2018), which found that Black Americans cited the news media as a key source of their organ donation-related medical mistrust beliefs. To date, much of the scholarship on the relationship between media and medical mistrust has occurred in the context of organ donation (Quick et al., 2016; Quick et al., 2014); these studies allude to the possibility that exposure to media may influence medical mistrust, these studies did not explicitly delve into or explain these relationships. The current findings suggest that the relationship between news media and medical mistrust extends beyond organ donation-related medical mistrust beliefs, to medical mistrust more broadly. Thus, it will be important for health communication scholars to consider and theorize about medical mistrust outside of the context of organ donation.

Currently, there are few models of medical mistrust. To date, the only model of medical mistrust addressing the antecedents of medical mistrust comes from public health (Hammond, 2010). While this model does focus on the antecedents of medical mistrust, our results suggest it

is missing a crucial element: mediated communication. Previously, investigations of the role of discrimination in medical mistrust focused on direct experiences (i.e., personal experiences). Our results suggest that it is not only direct experiences, but also vicarious experiences (e.g., mediated depictions of discrimination) that influence medical mistrust. Thus, attempts to create new models of medical mistrust must take communication elements and vicarious experiences into account. The current study suggests that by failing to consider these elements scholars are missing out on what may be a significant portion of our understanding of medical mistrust. Without a thorough understanding of medical mistrust, it will be difficult for health scholars to adequately tackle this barrier.

Practical Implications

Thus far, a portion of the communication literature explicitly examining medical mistrust, has focused on ensuring that health campaign messages do not elicit medical mistrust (e.g., Morgan, Harrison, Chewning, DiCorcia, & Davis, 2010; Thompson, Kalesan, Wells, Williams, & Caito, 2010). Health campaign messages, however, are situated in a larger communication environment (Randolph & Viswanath, 2004). Thus, health communication scholars should not only be concerned with how campaigns influence medical mistrust, but also how other messages in the communication environment influence medical mistrust. Messages influencing medical mistrust could come from both interpersonal communication (e.g., hearing about the Tuskegee Syphilis Study) and mediated communication (e.g., news report on a study's findings that Black Americans are less likely to prescribed pain medicine). While recent work has begun to shed light on the role of interpersonal communication (e.g., Bogart et al., 2016) in medical mistrust, our results indicate there is a need to continue to empirically explore the effects of mediated communication on medical mistrust.

This study empirically supports Williamson et al.'s (2018) finding that the media environment plays a role in medical mistrust beliefs. It suggests that when considering the role of medical mistrust in health outcomes, it is not enough to think about historical injustices and their impact on individuals' health behaviors. Our results provide evidence that recent events of racial discrimination (e.g., police brutality) could also influence individuals' medical mistrust; this may, in turn, affect their health behaviors. In other words, there appears to be a spillover effect; discrimination in non-health contexts influences individuals' perceptions of the medical system. To ensure that it was not the sole health-related topic (i.e., lead poisoning) driving analyses, this topic was partitioned out and analyses re-run. Results held even with the removal of the lead poisoning story, suggesting there is a spillover effect happening. This positions medical mistrust as connected to a broader issue of systemic racism that exists in various domains (Feagin, 2013) and reinforces the need for multi-level solutions to medical mistrust (Adams & Simoni, 2016).

The news articles provided in the current study were based on real news articles that individuals may encounter online or while scrolling through social media. Black Americans report encountering more race-related content than their counterparts (Anderson & Hitlin, 2016). Furthermore, that content is likely to show Black disadvantage (Gandy & Li, 2005) and discussions of discrimination (Anderson & Hitlin, 2016). Our study suggests that exposure to these news articles may also have ramifications for health. Exposure to discrimination not only has ramifications for individuals' mental health (Paradies et al., 2015; Tynes, Willis, Stewart, & Hamilton, 2019), but may also translate into willingness to engage in health behaviors. This is especially important to consider for health promotion efforts in the current national climate. We must be attuned to the additional effects exposure to these events may have. As movements are made towards structural competency in medical care (Metzl & Hansen, 2014), it may be

necessary for healthcare providers to consider the way in which exposure to mediated discrimination (e.g., police brutality) may influence Black Americans' hesitancy to engage with the medical system. Additionally, health communication scholars, should examine the extent to which exposure to mediated vicarious discrimination influences both medical mistrust and health intentions.

Limitations

In evaluating our findings, there are limitations to our study that should be acknowledged. To begin, our sample was comprised of college students, limiting our ability to generalize to the population more broadly. The existence of effects, however, in an age-group with less experiences and exposure to the healthcare system (Hammond, Matthews, & Corbie-Smith, 2010; Institute of Medicine, 2008), suggests these effects may also exist for older age groups. Future work should examine these effects beyond a college-age sample. Secondly, due to small subsamples, we were unable to specifically examine these effects for additional racial groups (e.g., Hispanic/Latinx). Given that other minority groups face discrimination (Pew Research Center, 2016; National Public Radio, Robert Wood Johnson Foundation, & Harvard T.H. Chan School of Public Health, 2017), future endeavors should explicitly investigate the effects of discrimination on medical mistrust for other racial groups. The heterogeneity of our "other" racial minority group may have contributed to lack of findings. Finally, although we found interesting bivariate relationships within racial groups, future research should be designed and powered to test moderation effects. It will be important for work to be conducted that is able to more closely examine these nuances. Research testing affective variables, or other factors, as moderators of the relationship between mediated vicarious discrimination and medical mistrust would be beneficial.

Conclusion

In this study, we sought to a) examine the relationship between discrimination experiences and medical mistrust and b) test the effects of mediated racial discrimination on medical mistrust. Our findings find support for the association between discrimination and medical mistrust, while expanding the understanding of this relationship to include mediated vicarious discrimination. Moving forward, it will be important to continue to examine the ways in which communication influences medical mistrust. Future studies should examine the types of message content that produce these effects in more representative samples. As health communication scholars, it is time to acknowledge and examine the role communication in medical mistrust. By doing so, health communication scholars may be one step closer to tackling medical mistrust.

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Table 1. Means and correlations for full sample

	Descriptives		Bivariate Correlations				
	M	SD	1	2	3	4	5
1. Prior personal experiences with discrimination	5.26	4.49	1				
2. Prior vicarious experiences with discrimination	9.07	6.39	.72**	1			
3. Medical mistrust	30.34	9.32	.40**	.48**	1		
4. Ethnic identity	21.90	5.43	.28**	.42**	.30**	1	
5. Linked fate	1.63	1.04	.30**	.30**	.21**	.25**	1

**$p <.01$, *$p<.05$

Table 2. Means and correlations for Black participants

	Descriptives		Bivariate Correlations				
	M	SD	1	2	3	4	5
1. Prior personal experiences with discrimination	7.12	4.98	1				
2. Prior vicarious experiences with discrimination	12.02	6.94	.71**	1			
3. Medical mistrust	36.75	8.14	.34**	.41**	1		
4. Ethnic identity	24.53	4.57	.20	.48**	.27*	1	
5. Linked fate	2.24	.80	.20	.31*	.22	.37**	1

**p <.01, *p<.05

Table 3. Means and correlations for Other participants

	Descriptives		Bivariate Correlations				
	M	SD	1	2	3	4	5
1. Prior personal experiences with discrimination	5.14	4.74	1				
2. Prior vicarious experiences with discrimination	9.90	6.38	.73**	1			
3. Medical mistrust	32.15	7.78	.30**	.35*	1		
4. Ethnic identity	22.79	5.00	.23	.52**	.17	1	
5. Linked fate	1.20	.96	.37**	.38**	.14	.24	1

**$p <.01$, *$p<.05$

Table 4. Means and correlations for White participants

	Descriptives		Bivariate Correlations				
	M	SD	1	2	3	4	5
1. Prior personal experiences with discrimination	3.94	3.38	1				
2. Prior vicarious experiences with discrimination	6.39	4.71	.60**	1			
3. Medical mistrust	24.67	7.33	.23*	.24*	1		
4. Ethnic identity	19.45	5.23	.14	.03	-.10	1	
5. Linked fate	1.43	1.04	.16	.08	-.07	.04	1

**p <.01, *p<.05

Table 5. Reported Medical Mistrust

Race	Means (SD)				ANOVA Results		
	No exposure	Control	Implicit	Explicit	F	p	η^2
All	29.30 (8.38)	28.65 (11.06)	32.29 (10.10)	31.11 (8.71)	1.56	0.20	0.02
Black	35.64 (2.95)	33.00 (11.06)	42.93 (7.31)	36.12 (5.87)	4.66	0.01	0.20
Other	33.42 (7.20)	33.31 (5.98)	29.71 (7.65)	32.63 (11.34)	0.66	0.58	0.04
White	22.71 (6.60)	22.15 (6.76)	26.90 (7.58)	26.68 (7.45)	2.64	0.06	0.09