

Not all beliefs against focusing on race are the same: It may depend on whether race is
conceptualized as a social reality or as an essentialized entity

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Abstract

Not all beliefs against focusing on race are the same: It may depend on whether race is conceptualized as a social reality or as an essentialized entity

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Statements expressing the idea that society should minimize attention to race are considered to reflect colorblind ideology. However, while many studies found strong and positive correlations between endorsement of these statements and racial bias and anti-egalitarianism, other studies have found the opposite. In addition, perceptions of a person who declares she is “colorblind” can be seen as prejudiced, yet in other situations, can be seen as a commitment to eradicate racial inequality. Why are there such conflicting associations among colorblind beliefs? In Part 1 of this dissertation, we examined the possibility that what are traditionally called colorblind statements actually represent multiple, distinct constructs. Study 1 tested and rejected the null hypothesis that statements commonly used to measure colorblind ideology all reflect a single latent factor. Studies 2a and 2b identified distinct clusters of these statements based on their

associations with various race-relevant attitudes and beliefs (e.g., race bias, social dominance orientation, multiculturalism). Both studies provide consistent evidence for at least two clusters of items from measures of colorblind ideology, with different and often opposite relations to race-relevant attitudes and beliefs. Study 3 further demonstrated that these clusters predict different race-relevant behavioral intentions, such as voting for race-conscious policy, budgeting priorities, and interracial interaction intentions. Finally, Study 4 identified one potential factor underlying the difference between these clusters: the aspect of “race” that these statements refer to. One refers to race as an *essentialized* quality, and the other, as an aspect of *social* reality. Part 2 extends this framework to understand the perceptions of a person who expresses a colorblind belief. Specifically, we hypothesized that reactions to a speaker who expresses a colorblind belief depends on whether the speaker is attempting to minimize race as an *essentialized entity* or as a *social reality*—the meaning of which is largely inferred from the topic of the larger conversation (Studies 5 & 6). Results showed that interviewees who made a colorblind statement in response to an interviewer acknowledging the *social* realities of race were perceived as more prejudiced compared to interviewees who responded with the same statement to a *race-essentializing* prompt. Study 7 tested the hypothesis that this is because a colorblind response is seen as disagreeing with the conception of race expressed in the interview prompt. Study 8 further extended this framework to explore the possibility that a Black individual making a colorblind statement and a White individual making the same statement are perceived to reflect different attitudes. The results suggest that not all efforts to minimize race are the same; a person can simultaneously be aware of racial disparities, committed to fight injustice, and value and appreciate diverse backgrounds (i.e., acknowledge the *social* realities of race), while at the same time hold a belief that all people, regardless of race, are fundamentally similar and share

common humanity (i.e., oppose the *essentialist* view of race). These findings add to the growing body of literature that clarifies when colorblind ideology is seen as reflecting racial prejudice, and when it is not.

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INTRODUCTION

As the U.S. grows increasingly diverse, and we quickly approach a minority-majority society, the long-standing issue of how we address racial difference and promote intergroup harmony reaches great urgency. This is perhaps most evident in the amount of attention being paid to it across all societal domains. For instance, it is of concern in legal rulings (Carbado & Harris, 2008), company organizational initiatives (Ely & Thomas, 2001), and the mission statements of educational institutions (Schofield, 2007). Even interpersonally, how best not to seem racist is of central concern among Whites (Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006). Despite these efforts, racial disparities persist, and intergroup conflict and discrimination remain rampant. What role do diversity ideologies then play in either reducing or maintaining these biases, conflicts, and inequalities?

One such diversity approach that has gained prominence is colorblindness, which suggests that the way of achieving racial equality and intergroup harmony is through minimizing attention to group memberships. This idea is based on the idea that if racial categorization is a precursor to racial prejudice and discrimination (Brewer & Miller, 1984), then society should do away with racial categorization. Following this reasoning, a colorblind society would be one in which people are treated equally because we do not see difference. This idea gained its position as the dominant interethnic ideology in the wake of the 1960s Civil Rights Movement, in response to racism and discrimination against Blacks in the U.S. Not surprisingly, then, this has been the most popular form of addressing diversity, with the colorblind approach appearing in how workplaces describe their culture (Purdie-Vaughns, Steele, Davies, Dittmann, & Crosby, 2008), in how teachers seek to model equality (i.e., "race does not matter"; Pollock, 2004), and even how legal precedent is established (*Parents Involved in Community Schools v. Seattle, School District*, 2007).

Inconsistencies in the literature

Given the popularity of this approach, social psychology has recently directed its attention toward evaluating its effectiveness in promoting intergroup harmony (see Plaut, 2010; Rattan & Ambady, 2013; Rosenthal & Levy, 2010 for reviews). So far, there is little consensus. Some studies find that the colorblind concept is associated with reduced race bias (e.g., Levin et al., 2012; Wolsko, Park, Judd, & Wittenbrink, 2000), whereas others find that the colorblind concept is associated with increased race bias (e.g., Richeson & Nussbaum, 2004).

For instance, colorblind ideology is endorsed more by individuals favoring equality than individuals favoring inequality (Knowles, Lowery, Hogan, & Chow, 2009), serves an egalitarian role by attenuating the relationship between preference for hierarchy and prejudice (Levin et al., 2012), and being exposed to colorblind ideology has been shown to reduce measures of both implicit and explicit race bias (Wolsko et al., 2000; Correll, Park, & Smith, 2008). However, other studies suggest the opposite: that prejudiced individuals are more likely to endorse colorblind beliefs (Mazzocco, Cooper, & Flint, 2011; Neville, Lilly, Duran, Lee, & Browne, 2000), that it can be used to legitimize inequality (Knowles & Chow, 2016; Mazzocco et al., 2011), and that colorblind endorsers exhibit more prejudiced behavior than non-endorsers, making minorities more uncomfortable (e.g., Holoien & Shelton, 2012; Plaut, Thomas, & Goren, 2009; Vorauer, Gagnon, & Sasaki, 2009). Taken together, the findings are contradictory and confusing.

The problem in part is that the colorblind concept is often studied using vastly different definitions (Plaut, 2010; Rosenthal & Levy, 2010). While all definitions of colorblindness involve minimizing attention to racial groups, the implicit message of why or how we should minimize it varies. For example, some researchers define colorblindness as "the ideal of learning

to judge others as individuals and not on the basis of their social group membership" (Wolsko et al., 2000), while others define it as "the belief that racial categories do not matter and should not be considered when making decisions such as hiring and school admissions" (Richeson & Nussbaum, 2004). Still others define it as simply "ignoring race, or skin color" (Jones, 1997), or a simple "opposition to racial categorization" (Mazzocco et al., 2011). More recently, research shows that the colorblind concept can be redefined from having a distributive meaning (e.g., a concern with equalizing outcomes, even if this requires different treatment across individuals) to a procedural meaning (e.g., a concern with equal procedures, even if this leads to different outcomes across individuals) (Knowles et al., 2009).

Theoretical discussions about "ignoring race" have primarily taken on two distinct flavors as well. One prominent view discusses colorblindness as a form of *racism denial*, or as a way to ignore current inequalities and maintain racial hierarchy (Bonilla-Silva, 2003; Neville, Awad, Brooks, Flores, & Bluemel, 2013). For instance, colorblind strategies are often employed by anti-egalitarian majority group members to maintain hierarchy when their position is threatened, because it removes the very language needed to address inequality (Chow & Knowles, 2016; Knowles et al., 2009). Even among children, adopting a colorblind approach blocks awareness of instances of discrimination when they occur, and downplays the perceived severity of instances of racial bias (Apfelbaum et al., 2008).

However, "minimizing the importance of race" is also consistent with the Common Ingroup Identity Model of prejudice-reduction (see Dovidio, Gaertner, & Saguy, 2009; Gaertner & Dovidio, 2012). This model aims to reduce the ingroup-outgroup bias that naturally arises from forming group identities (Tajfel & Turner, 1986) by focusing one's identity on the common superordinate identity rather than on subgroup divisions. In this way, previous *outgroup*

members (members of other racial groups) can instead be considered *ingroup* members (members of the same human race), and the commonalities among people across groups are the focus rather than the differences. Indeed, this model has been shown to reduce prejudice by increasing outgroup warmth and empathy, though it has also been criticized for ignoring difference (see Gaertner & Dovidio, 2012, for a review).

How are we to make sense of such mixed messages?

The goal of this work

The goal of this work is to clarify the colorblind concept by examining the possibility that measures of colorblind belief *themselves* reflect multiple constructs, with distinctly different psychological meanings.

To illustrate, let's compare two famous examples of colorblind ideology. The first is Martin Luther King, Jr.'s dream that Americans of all colors "will one day live in a nation where they will not be judged by the color of their skin but by the content of their character" (King, 1963). The second is in the statement by U.S. Supreme Court Chief Justice John Roberts, used in his rejection of efforts to integrate a school district's campuses: "The way to stop discrimination on the basis of race is to stop discriminating on the basis of race" (*Parents Involved in Community Schools v. Seattle School District*, 2007).

These two statements are both about being "blind to color", and minimizing attention to race, but they have distinctly different flavors to them. One can be perceived as a message affirming the common humanity that all people share, regardless of race, stating that all humans deserve equal respect and opportunities. The color of one's skin is not a basis for judging one's value as a human. Its underlying message challenges the notion that the color of one's skin is

informative and meaningful of one's traits and abilities, thus challenging the basis on which the oppression and mistreatment of entire groups has historically been justified.

The other is about implementing this “colorblind” ideal by turning a blind eye to race in social policies today. The problem with this version is that it ignores the deeply entrenched, race-related, systemic and institutional discriminations that currently do exist. In other words, colorblind here is with regard to ignoring the significant *social* realities that a society structured around race has already created.

Thus, in these two examples, we have two different ways of “minimizing attention to race” that feel quite different, and which provide the basis for the conceptual framework on which this dissertation is based.

Our proposal: The different conceptions of race

I'm going to propose a conceptual framework that will serve as a lens for understanding previous research on the colorblind concept, and bring clarity to this confusion by proposing that colorblindness can take on different meaning because there are different conceptions of *race* embedded in its expression (Markus & Moya, 2010). Depending on whether the call to minimize attention to race is with regard to race as a *biologically-rooted and informative entity* versus a *social* reality, the endorsement and expression of such a belief can lead to vastly different results. To illustrate, consider the emergence of the concept of race in American history (Smedley & Smedley, 2005; Richeson & Sommers, 2016).

Essentialist beliefs about race were the predominant view of race for a long time. This concept of race argues that “race” is a biologically hardwired and defining aspect of humans, and that members of one racial group are qualitatively different from members of another racial group. Initially used as a way to justify the oppression of groups of people that shared similar

phenotypic traits (e.g., skin color, hair texture, lip thickness), “race” was conceptualized as a mutually exclusive, discrete category that one either belonged to, or not. This conception was used by those in a position of power in society to argue that some groups are innately inferior compared to others. With this conception of race, the powerful in post-independence United States, for example, were justified in preaching for their own freedom and equality, without feeling hypocritical for their own oppression of other groups (Smedley & Smedley, 2005).

Through this view, differences in *phenotype* became interpreted as more than just a matter of phenotype—it became indicative of a fundamental part of who people are. “Race” became an entity that was responsible not only for how people look, but for explaining their personalities, abilities, and behaviors (Rothbart & Taylor, 1992; Yzerbyt, Corneille, & Estrada, 2001). And because members belonging to the same racial group were thought to share the same essential core, all members of the same racial group came to be perceived as homogeneous representations of their race (e.g., Haslam, Rothschild, & Ernst, 2000; Bastian & Haslam, 2006). It soon followed that any *social* differences observed between racial groups was a result of the inherent *biological* differences underlying race—and any racial stereotypes, prejudice, and discrimination thus became inarguably justified (Bastian & Haslam, 2006; Keller, 2005; No et al., 2008; Williams & Eberhardt, 2008).

Scientists have since shown this “reality” of race to be unfounded, as mapping of the human genome in the early 2000s have shown that there is no gene for race, and that the phenotypic traits on which racial categories are based bear no functional relationship to a person’s internal traits such as personality, intelligence, and ability (Bonham, Warshauer-Baker, & Collins, 2005; Collins, 2004). In fact, the characteristics that are usually used to define race can be combined in any combination, thus challenging the idea of race as a discrete entity.

In light of this, efforts have been made to dispel this view of race, to eradicate this false basis on which mistreatment of racial groups has historically been justified. With hope of fostering greater harmony between races, popular discourse now advocates for the lack of scientific basis for racial categories, and emphasizes the common humanity that underlies us all (Clinton, 2000)—a language similar to those used by the civil rights movement in the U.S. to challenge the legitimacy of racial oppression (King, 1963). In this sense, race is not “real” as an *essentialized* entity.

However, though science may have dispelled such ideas, the cultural consciousness is slower to update because the effects of such beliefs have been *built* into the fabric of society, into our institutions, policies, and collective norms. That is, the *concept* of race still affects where people live, how people are treated, how people are seen, the medical treatment people receive, the opportunities people have, and how people come to identify (Markus & Moya, 2010): “disparities in economic security, political power, and opportunities for social advancement produce different social realities, which substantially shape the everyday lives of members of advantaged and disadvantaged groups” (from Dovidio et al., 2013).

Further evidence of this *social* reality to race is that regardless of actual ability, mere awareness of prejudice against one’s group can hinder racial minorities’ performance on stereotype-confirming tasks (e.g., tests that are considered indicative of intelligence and often used by school admissions, and thus with very real consequences; Steele & Aronson, 1995). In addition, collective experiences and socialization with race can lead one to consider their racial identity as a source of belonging and pride (Markus & Moya, 2010). Thus, regardless of the absence of a *biological* basis for race, these very real experiences with race, in a society structured by race, creates a *social* reality to race that cannot and should not be ignored (Markus,

Steele, & Steele, 2000; Markus & Moya, 2010; Smedley & Smedley, 2005). In this sense, race as a *social* reality is very much “real.”

The function of a colorblind response

Because a colorblind statement, which at its core calls to “*minimize* attention to race, we argue that its meaning depends on the *conception* of race that the expresser is trying to minimize. That is, if the call to minimize attention to race is seen as minimizing the *essentialist* conception of race, the colorblind expresser may be understood as objecting to outdated justifications for racial stereotyping and mistreatment, and may thus be perceived as egalitarian and unprejudiced. If the call to draw attention away from race is with respect to race as a *social* reality, however, the colorblind expresser may be understood as attempting to deny the existence of race-based inequalities and identities formed by experiences with race, and may thus be perceived as anti-egalitarian and prejudiced.

Overview

This dissertation tests the utility of this framework for explaining the conflicting findings regarding colorblind ideology. However, in any discussion about diversity ideologies and its impact on intergroup relations, it is important to distinguish between the two main perspectives that are involved. First, there is the perspective of the *endorser*—the one who holds the belief and may act on that belief—and then there is the perspective of the *perceiver*—the one who interacts with the endorser and is the recipient of whatever actions were a result of endorsement of that belief. These are important to distinguish because regardless of the intention of the endorser, the perceiver’s experience can occur independent of that and be very different from what the endorser meant.

Thus, this dissertation is broken up into two parts. In Part 1, we first unpack colorblind beliefs from an *endorsement* perspective. Specifically, we examined the possibility that measures

of colorblind endorsement reflect multiple constructs, with distinctly different psychological meanings. As will be revealed in the first 4 studies, across multiple methods, there is consistent evidence for at least 2 different versions of colorblindness that differentially predict racial attitudes (e.g., race bias, anti-egalitarianism, multiculturalism), as well behavioral intentions that are of consequence (e.g., voting, money allocation, budgeting prioritization).

Then, in Part 2, we expand on the underlying meaning behind those distinctions, and use those meanings to explain why reactions to someone expressing a colorblind belief might be more negative in some situations, but less negative in others (i.e., the *perceiver's* perspective). In these last 4 studies, we demonstrate that context is important for determining reactions to a colorblind statement, including the context that is defined by the larger conversation in which the colorblind statement is made, as well as context that is inferred by the race of the colorblind speaker.

In sum, across both parts, we show that colorblind ideology can take on at least 2 different meanings with distinct psychological associations and consequences, that these 2 different meanings are largely associated with the particular conception of “race” that is at play, and that these distinct meanings are inferred by perceivers through different contexts, which then lead to different reactions.

PART 1: DIVERSITY IN COLORBLIND BELIEFS FROM AN ENDORSEMENT PERSPECTIVE

Many studies found that endorsement of colorblindness is positively related to race bias and anti-egalitarianism (e.g., Mazzocco, Cooper, & Flint, 2011, Study 2; Neville, Lilly, Duran, Lee, & Browne, 2000), others found that it is negatively related (e.g., Hahn, Banchevsky, & Park, 2015; Levin et al., 2012; Wolsko et al., 2000). In addition, some studies found that endorsement of colorblindness is negatively correlated with multiculturalism, the idea that society should

acknowledge and *appreciate* group differences (e.g., Rosenthal & Levy, 2012, Studies 1 & 3), and thus the conceptual opposite to colorblindness. However, others found they are positively correlated (e.g., Hahn et al., 2015; Ryan, Hunt, Weible, Peterson, & Casas, 2007), or not correlated (e.g., Ryan, Casas, & Thompson, 2010).

In light of these and other inconsistent findings, many scholars suggest that the colorblind concept can encompass many different meanings (Babbitt et al., 2016; Hahn et al., 2015; Knowles, Lowery, & Chow, 2009; Mazzocco et al., 2011; Rattan & Ambady, 2013; Yogeeswaran, Davies, & Sibley, 2016). However, despite the theoretical reasons to suspect that there are important differences among beliefs about reducing focus on race, there has yet to be a systematic and direct examination of the items used to measure it.

An important implication of distinguishing between different colorblind beliefs is that it opens the possibility that endorsement of one type of colorblind belief may not necessarily presuppose another. For example, if a person “minimizes attention to race” by focusing on the commonalities across humans, it may not necessarily mean that they also believe that racism is no longer an issue. Such possibilities may be reflected in the Dual Identity Model (Dovidio, Gaertner, & Saguy, 2007). According to this model, one can embrace subgroup identities (i.e., racial identities are important) while *also* endorsing the notion that at the core, people are the same (i.e., we are all human). Research investigating the Dual Identity Model shows that such an approach can increase the empathy and outgroup warmth that comes from emphasizing commonality among all humans, while also allowing for recognition and discussion of race-based differences in experience and opportunity (Banfield & Dovidio, 2013; Saguy et al., 2008).

Part 1 examines the possibility that there are meaningful differences among beliefs that have typically been considered “colorblind.” As a first step, in Study 1, we tested the hypothesis

that the statements that have been used to measure colorblindness reflect more than one underlying concept. In Studies 2a and 2b, we examined the relations between endorsement of these statements and endorsement of relevant race-related attitudes. We reasoned that if these statements indeed reflected a monolithic, unitary construct, they should have a similar pattern of correlations with race-related attitude scales. In contrast, if they reflect multiple distinct concepts, they should have distinct patterns of correlations with race-related attitude scales, suggesting that multiple constructs are being measured under the overarching “colorblind” term. In Study 3, we tested the utility of making such distinctions for predicting different race-relevant behavioral intentions (voting intention, budgeting priorities, money allocation) as well as willingness and comfort engaging in interracial interactions. Finally, in Study 4, we explored one potential underlying meaning that may explain the difference between the two main clusters of beliefs about minimizing attention to race.

Study 1: Is there more than one construct represented within measures of colorblindness?

We identified published studies examining people's endorsement of colorblindness, and gathered all items that have been used to measure colorblindness. We then asked participants to rate their endorsement of each statement, and conducted a principal axis factoring to see whether they in fact represented the same unitary factor.

Method

Participants

490 participants were recruited through Amazon MTurk ($M_{age} = 36.33$, $SD_{age} = 11.79$; 46.1% female; 76.9% White, 8.2% Asian American, 5.1% African American, 3.5% Latino American), in exchange for \$1. We opted to use a 5:1 participant-to-item ratio based on recommended procedures for establishing appropriate sample size for factor analysis (Zhao, n.

d.). After excluding participants who missed an attention check or completed the survey more quickly than feasibly possible (< 5 minutes), our final sample consisted of 466 participants.

Measures

Published Colorblind Scales. We reviewed past research and identified measures used to assess colorblind endorsement. Inclusion criteria were: (1) that the measured construct be explicitly labeled by the authors as "colorblindness," (2) that the construct be empirically tested or measured, and (3) that research on the construct be published in peer-reviewed journals since the year 2000¹. Because we refer to colorblindness as a diversity ideology broad in focus, we lastly required (4) that the construct not be limited to a specific context (e.g., the classroom) or a specific group (e.g., African-Americans).

Using these criteria, we identified 9 individual difference scales specifically created to measure colorblind endorsement. In all, we included 61 total items, all of which were rated on a 1 (strongly disagree) to 7 (strongly agree) scale. For data analysis, items that were worded in the opposite direction were reverse-coded such that higher values indicated higher levels of "colorblind" endorsement. For ease of reference, all colorblind items going forward will be referred to by the first author of the scale of which they are a part, and item position in the original scale (e.g., "Levin4" for the fourth item of the Levin et al., 2012 scale; see Supplemental Materials 1.1 for items).

Social Desirability Scale. Many of the items in the above colorblind scales are positively framed. Moreover, beliefs about race are a socially sensitive topic and participants may be

¹ Although colorblindness has been studied as early as 1986 (e.g., Schofield, 1986), empirical research on colorblindness in psychology did not take off until 2000. This is when the Wolsko et al. (2000) priming study, which is the basis for much of the experimental work today, and the oldest validated individual difference scale that is still in use today (CoBRAS; Neville et al., 2000), first came out. We wanted our constructs to focus on how colorblindness has been represented in contemporary research.

motivated to respond favorably. To control for social desirability and acquiescence tendencies, we included a shortened version of the Impression Management subscale of the Balanced Inventory of Desirable Responding, which includes four positively-framed items, and four negatively-framed items, each rated on a 1 (strongly disagree) to 7 (strongly agree) scale (BIDR 6; Paulhus, 1991; Hart, Ritchie, Hepper, & Gebauer, 2015; see Supplemental Materials 1.2). For social desirability, we reverse-scored the items from the Social Desirability scale that were worded in a socially *undesirable* direction, and computed an average score, such that higher scores indicated greater tendency toward impression management (Stöber, Dette, & Musch, 2002). For acquiescence tendencies, we left all social desirability responses in their original direction and computed an average score. Because half the items were conceptually in the reverse, a higher score indicates greater acquiescence tendency. However, preliminary analyses (see Supplemental Materials 1.2) indicated that the influence of social desirability and acquiescence were negligible; the results reported hereafter reflect the unadjusted colorblind responses.

Procedure

Participants completed all measures in an online survey. They first rated their agreement with the 61 items from the 9 colorblind scales, each item presented one at a time in randomized order. Then participants completed the social desirability scale, followed by demographics.

Results

The means and standard deviations of endorsement of each colorblind item are reported in Supplement Materials 1.3.

To examine if the set of 61 colorblind statements represent a single latent factor, we conducted Principal Axis Factoring with varimax rotation, using Mplus version 6.1 (Muthen & Muthen, 2010), using the MLR estimator. We compared the fit of a model with two latent factors

against the fit of a model with one latent factor. Because the latter is nested within the former (i.e., it is a special case of the former, in which the two latent factors are perfectly correlated with each other), we were able to use the Satorra-Bentler chi-square test for comparing two models in the goodness of fit. The null hypothesis is that relaxing the constraint requiring the two latent factors to be perfectly correlated does not result in an increase in indices of model fit beyond what is expected by the additional free parameter.

The results are shown in the first row of Table 1. The chi-square value for the single factor model (the top row) was 8853.911, with a *df* of 1769. The chi-square value for the two factor model (the second row) was 4543.73, with a *df* of 1709. The chi-square value for the *difference* between these two models was 4524.74, with a *df* of 60. The null hypothesis that the greater fit of the two factor model compared to the single factor model is simply by chance was rejected at $p < 10^{-7}$.

Similar tests for the increase in fit due to increasing the number of latent factors in a model resulted in statistically significant increases in fit, for the comparison of the 3 factor model against the 2 factor model ($\chi^2 = 629.70$, *df* = 59), and for the comparison of the 4 factor model against the 3 factor model ($\chi^2 = 412.67$, *df* = 58).

Table 1.

Results of the confirmatory factor analysis

N of latent factors	χ^2	<i>df</i>	AIC	BIC	RMSE		SRM R	χ^2 for difference in fit (<i>df</i>)	<i>p</i> for the difference in fit
					A	CFI			
1	8853.91	1769	99192.76	99951.14	0.093	0.498	0.159		
2	4543.73	1709	94327.48	95334.51	0.060	0.799	0.052	4524.74 (60)	$p < 10^{-7}$
3	3710.50	1650	93414.89	94666.44	0.052	0.854	0.040	629.70 (59)	$p < 10^{-7}$
4	3205.54	1592	92910.62	94402.53	0.047	0.886	0.034	412.67 (58)	$p < 10^{-7}$
5	2795.61	1535	92544.94	94273.06	0.042	0.911	0.031	371.66 (57)	$p < 10^{-7}$

6	2546.23	1479	92332.75	94292.95	0.039	0.924	0.028	205.75 (56)	$p < 10^{-7}$
7	2328.74	1424	92172.71	94360.84	0.037	0.936	0.026	189.56 (55)	$p < 10^{-7}$

Study 1 Discussion

Table 1 shows that increasing the number of latent factors to as many as 7 would significantly increase the fit. However, one should not necessarily assume that this indicates that as many as 7 distinct constructs are meaningfully reflected in the set of 61 colorblind statements. For example, some of these latent factors may reflect similarities in how some statements are worded. Thus, at this point, although we believe the results suggest that there is more than one factor underlying the intercorrelations among the 61 colorblind statements, we refrain from making a strong interpretation about the number of *meaningfully* distinct constructs represented in these statements.

In order to gain greater confidence in the number of constructs that are meaningfully distinct, in Study 2 we examined the patterns of associations between these statements and a number of existing scales of race-relevant attitudes.

Study 2: What are the constructs that are represented within colorblind measures?

Following the strategy of validating the meaning of latent variables by their "ability to explain the variance in the outcomes of interest" (e.g., Morgan & Hunt, 1994), Study 2 examined the relations between the factors identified in Study 1 and a number of variables related to attitudes about race and race relations, such as Symbolic Racism, Social Dominance Orientation (SDO), and Multiculturalism. The goal is to identify a parsimonious set of factors that are relevant to these attitudes, while avoiding inclusion of spurious factors ("Validating Principal Components Analysis," 2019). Specifically, we reasoned that if there are multiple, meaningfully different constructs reflected among colorblind items, they should have distinct patterns of correlations with measures of race-relevant attitudes. If, on the other hand, the clustering of

items detected by Study 1 merely reflects qualities *other* than meaningfully distinct constructs, such as linguistic similarities or response sets, then these items will all have similar patterns of correlations with race-relevant attitudes.

To capture a more comprehensive set of ideas that have been discussed in the literature under the conceptual umbrella of colorblindness, we included 8 additional items to represent colorblind constructs that have been empirically examined in the literature, but for which no measures of individual difference are available. Specifically, colorblindness has been operationalized as an avoidance of mentioning race during interracial interactions (e.g., Apfelbaum et al., 2008; Norton et al., 2006; Pauker, Apfelbaum, & Spitzer, 2015), and it has been argued that colorblindness can take on a distributive meaning focused on equal outcomes, or a procedural meaning focused on equal treatment in policy (Knowles et al., 2009). However, there have not been studies examining individual differences in these forms of colorblindness.² To represent these conceptualizations of colorblindness, we created items based on the wording in the original publications. See Supplemental Materials 2.1 for full item wordings and some information about their meaning (e.g., convergent and discriminant validity).

In sum, in Study 2, we tested 69 colorblind statements, and examined their patterns of correlations with measures of race-relevant attitudes. Based in part on the results of Study 2a, we preregistered (<https://osf.io/a7nfx/>) hypotheses about how different colorblind items would

² Colorblindness is also operationalized in experimental work in the form of a colorblind prime (Wolsko et al., 2000; Purdie-Vaughns et al. 2008). In both cases, we believe the included individual difference items capture the ideas represented in those primes. In fact, the Ryan et al. (2007; 2010) scale was explicitly created based on the Wolsko et al. (2000) conceptualization of colorblindness. Thus, we did not create additional items for these two representations of colorblindness, as we believe they are already represented.

exhibit distinct patterns of relations to the measures of these related constructs, and tested them in Study 2b.

Study 2a: Preliminary study

Method

Participants

153 MTurk workers ($M_{\text{age}} = 35.46$, $SD_{\text{age}} = 11.96$; 53.6% female; 75.2% White, 8.5% Asian American, 6.5% Black/African American, 5.2% multiracial, 2.6% Latino American) completed an online survey, in exchange for \$1.

Materials

Colorblind measures. In Study 2a, we aimed to not overwhelm participants by including the entire set of colorblind items. Instead, we selected a subset of the 69 items (61 of which were examined in Study 1, 8 of which we created), with the goal of retaining the breadth of constructs represented while excluding items that were largely redundant with other items. Specifically, the colorblind items used in Study 2a were selected based on an exploratory factor analysis of the 69 items using the Study 1 sample ($n = 466$), who in addition to the 61 items from the published measures also rated their endorsement of the 8 additional items described above. There were 11 orthogonal factors with eigenvalues of 1 or above. We chose two items from each factor. See Supplemental Materials 2.2 for the final set of 22 colorblind items.

Measures of race-relevant attitudes. To understand the meanings of the different colorblind statements, we examined how endorsement of each statement relates to measures of race-relevant attitudes and beliefs that are conceptually related to the colorblind construct, but for which empirical evidence is inconsistent (e.g., assimilationism, multiculturalism, preference for hierarchy, race bias). We also looked at how these items predict beliefs related to behavioral outcomes (e.g., support for affirmative action, support for government involvement in reducing

racial disparities). See Supplemental Materials 2.3 for the measures relevant to colorblindness included in the current study, including descriptions of each construct, the rationale for inclusion, and item text.

All scales were rated on a 1(strongly disagree) to 7(strongly agree) scale, with the exception of the Opposition to Affirmative Action scale, which was rated on a 1(strongly support) to 7(strongly oppose) scale. To create index scores for each of these constructs, participants' responses were standardized (after reverse-coding when the item wording was the opposite of the construct being measured) and then averaged, such that higher scores indicate greater endorsement of the construct.

Procedure

Participants indicated their level of endorsement for each of the 22 colorblind items, presented one at a time, randomized at the item level. After completing these items, the race-relevant attitude scales were presented in randomized order. For these scales, randomization was done at the scale level, with all the items belonging to a scale presented consecutively. Participants then provided demographic information.

Results

For the means and SDs for the race-relevant attitude scales and the colorblind items, see Supplemental Materials 2.4 We examined the possibility that ceiling and floor effects may be attenuating the correlations between these items and measures of race-related attitudes. However, the magnitude of skewness of these items were unrelated to their correlations with measures of race-relevant attitudes.

Next, we examined how each item correlated with each of the scales of race-relevant attitudes and beliefs. If items from scales measuring colorblindness in fact reflect the same

underlying construct, they should relate similarly to the scales, and there would not be any substantial difference in correlation patterns. However, results revealed substantial heterogeneity in associations (see Supplemental Materials 2.4.2). For example, some colorblind items (all coded such that greater values indicate greater colorblind beliefs) related positively to Symbolic Racism (e.g., *Neville* items, *Knowles* items), while others related negatively (e.g., *Hahn*², *Levin*⁶, *Ryan*³). Similar heterogeneity in pattern of associations were found for SDO Dominance, SDO Opposition to Equality, Internal Motivations to Respond without Prejudice, Multiculturalism, Race-as-Informative Essentialism, Race-as-Fixed Essentialism, Opposition to Affirmative Action, and Opposition to Racial Policy. Assimilationism did not show significantly opposite associations with different colorblind items, but there were still wide differences in the magnitudes of correlations.

To determine the statistical significance of the differences among these correlations, we used the Steiger (1980) method, implemented in the *psych* package in R, to compare the correlation between a scale with one colorblind item against the correlation between that scale with another colorblind item (see Supplemental Materials 2.4.3 for more details).

This analysis was repeated for all 11 scales (8 original scales with 3 of them divided into 2 subscales each). For each scale, we made 231 comparisons (the number of all possible pairs of 22 items). Results showed that out of the 231 pairs of colorblind items per scale, there were at least 51 significant differences in correlations (as for Race-as-Fixed Essentialism). For SDO Opposition to Equality, for which we found the largest number of significant differences in correlations, 161 out of the 231 comparisons were statistically significant at $p < .05$.

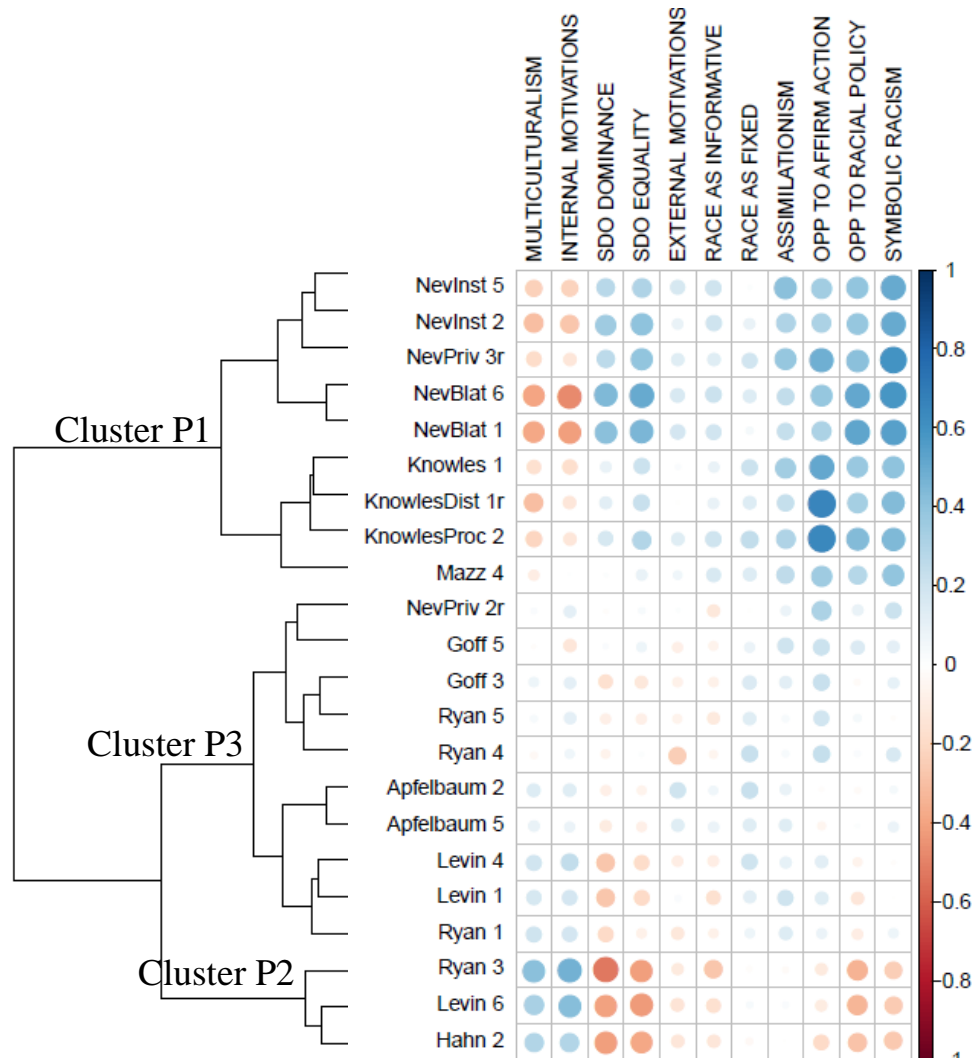
Sorting colorblind ideas using hierarchical clustering

In order to make sense of the widely varying patterns of associations, we used the heatmap function in R (from the *corrplot* package) to organize the 22 colorblind items such that items with a similar pattern of correlations with the 11 scales were grouped together.

The results are shown in Figure 1, in which the magnitude and direction of the correlations are represented by color (ranging from blue for positive correlations to red for negative correlations). The 22 colorblind items are represented by each of the 22 rows, and the 11 scales are represented by the 11 columns.

Figure 1.

Subset of 22 colorblind items, sorted by hierarchical clustering based on their pattern of correlations with the 11 race-related attitude scales (Study 2a)



Note. Blue circles indicate positive correlations; red circles indicate negative correlations. Circle size and deepness of color reflect correlation strength, with larger circles and deeper color indicating strong correlations, and smaller, fainter circles indicating weak correlations. For correlations, organized in a table that follows this clustering structure, see Study 2a Supplemental Materials 2.4.2.

As Figure 1 shows, there appear to be 2 main clusters with distinct patterns of correlations with the race-relevant attitude scales, which we call Clusters P1 and P2, and a third cluster that appears to represent all the “rest” of the items that do not have clear associations with attitudes about race, which we call P3 for convenience (“P” stands for “preregistered” as these

clusters became the basis of preregistered predictions tested in Study 2b; the specific cluster assignment for each item is indicated in Supplemental Materials 2.4.2). However, as described below, because P3 is only technically a cluster due to the items' shared *lack* of association with attitudes about race, for the purpose of this study, we focused on the first two, and view the results as suggesting that there are *at least* two (and possibly more) *meaningfully* distinct clusters among items that have been used to represent colorblind ideology.

Cluster P1 consists of 8 of the 22 colorblind items. This cluster is characterized by its strong positive associations with Symbolic Racism ($r = .39$ to $r = .60$), Opposition to Affirmative Action and Opposition to Race Policy ($r = .31$ to $r = .65$, and $r = .29$ to $r = .52$, respectively), SDO Dominance ($r = .01$ to $r = .45$), SDO Opposition to Equality ($r = .10$ to $r = .51$), Assimilationism ($r = .24$ to $r = .42$), and Race-as-Informative Essentialism ($r = .09$ to $r = .21$). It is further characterized by moderate negative correlations with Multiculturalism and Internal Motivations to Respond without Prejudice ($r = -.09$ to $r = -.39$, and $r = .007$ to $r = -.48$, respectively).

Cluster P2 consists of 3 of the 22 colorblind items. In contrast to Cluster P1, this cluster is characterized by its *negative* associations with SDO Dominance and SDO Opposition to Equality ($r = -.42$ to $r = -.53$, and $r = -.39$ to $r = -.43$, respectively), Symbolic Racism ($r = -.25$ to $r = -.27$), Opposition to Racial Policy ($r = -.29$ to $r = -.34$), and Race-as-Informative Essentialism ($r = -.14$ to $r = -.27$). Further, it is *positively* correlated with Multiculturalism and Internal Motivation to Respond without Prejudice ($r = .30$ to $r = .42$, and $r = .30$ to $r = .48$, respectively).

The remaining 11 of the 22 colorblind items were relatively uncorrelated with the race-relevant constructs we measured ("Cluster P3"). That is, the majority of these items showed near-zero correlations with the scales ($|r| < .15$), the only exception being that some items

showed a slight negative association with SDO Dominance and SDO Opposition to Equality ($r = -.18$ to $r = -.27$) and slight positive association with Internal Motivations to Respond without Prejudice and Multiculturalism ($r = .18$ to $r = .24$), or a slight positive association with Opposition to Affirmative Action ($r = .19$ to $r = .32$).³

Study 2a Discussion

The results of Study 2a suggest that colorblind statements reflect at least two distinct constructs with diametrically opposing associations. The meaning of the third cluster is not clear as it did not correlate with most of the scales of race-relevant attitudes and beliefs.

These findings begin to provide insight into the different psychological constructs colorblind statements represent. However, there were several limitations with this study. First, Study 2a only tested a small sample of the full set of colorblind statements. Second, we did not have *a priori* hypotheses regarding the correlation patterns or clustering structure of these colorblind statements. Third, our sample size was relatively small. To gain greater confidence in these findings, we conducted a follow up study addressing these limitations.

Study 2b: Expanded study

The purpose of Study 2b was to examine the robustness of the findings of Study 2a, with several improvements. First, we used the entire set of 69 colorblind statements, rather than the representative set of 22 we used in Study 2a. Second, we recruited a much larger sample of participants. Third, we preregistered and tested *a priori* hypotheses, generated based on the results of Study 2a (<https://osf.io/a7nfx/>). Specifically, we predicted that the major findings of

³ To better illustrate the patterns of each cluster, we averaged all the standardized colorblind items by cluster to create index scores for each of the 3 clusters. We then correlated those index scores with the index scores of the related scales. As Supplemental Materials 2.4.4 shows, the cluster patterns become more dramatic. The correlations reported here provided the basis for our predictions for Study 2b.

Study 2a would replicate. That is, we predicted that for White participants, the 3 “clusters” of items identified in Study 2a will differ from each other in how they correlate with race-relevant attitudes and beliefs relevant to colorblindness (e.g., Symbolic Racism, SDO, Multiculturalism). In the preregistration, for the first clusters we specified the expected pattern of correlations with race relevant attitudes, and for the items in the third cluster, we predicted that they will only have weak and inconsistent patterns of correlations with them. In addition to examining the results involving the preregistered set of 22 items, we also conducted exploratory analysis using the full set of 69 items.

Because the majority of our Study 2a sample ($n = 115$ of 154) identified as White, we predicted that we would replicate the results of Study 2a among White participants in Study 2b. We also preregistered and conducted exploratory analyses among African American participants in Study 2b. However, while generally consistent with the results among White participants, those results were less clear, suggesting that the construct of colorblindness may be even more complex and nuanced among them. Thus we will focus on the results among White participants, and refrain from generalizing beyond Americans who identify themselves as White. For the specific results from the African American sample, see section 3.3 of the supplementary materials.

Method

Participants

298 self-identified White MTurk workers participated in this study in exchange for \$2.75. After excluding those who missed an attention check ($n = 20$), or lived in the U.S for less than 10 years ($n = 3$), our final sample consisted of 282 White participants (152 female, 129 male, 1 other; $M_{\text{age}} = 35.53$, $SD_{\text{age}} = 11.27$).

Materials

Colorblind statements. The same set of 69 statements from which items in Study 2a were drawn were included in Study 2b.

Race-relevant attitudes and beliefs. The same set of scales that were included in Study 2a were included in Study 2b. However, we made a few improvements to the scales for clarification, while keeping to the original as much as possible. See Supplemental Materials 3.1 for specific revisions made in Study 2b.

In addition, even though it has been well-established that anti-egalitarians use colorblind rhetoric to deny inequality or maintain status quo (Knowles et al., 2009; Neville et al., 2013), more recent work suggests that egalitarians might also endorse colorblindness because of a belief that inequality exists but that equality is not possible to achieve, and thus the next best alternative may be for society to instead not attend to race (Chow & Knowles, 2016). In order to address this possibility, in addition to the original 11 subscales, we also included 4 items that assessed participants' beliefs about whether inequality exists today and whether achieving equality is possible. Specifically, 2 items were designed to capture the belief that equality is not possible to achieve (e.g., "Racism will always be an issue, no matter what we try to do to eliminate it", reverse-scored), and 2 items were designed to capture the belief that equality has already been achieved (e.g., "When it comes to peoples chances to get ahead, race no longer matters in the United States"). Participants rated these 4 items on a 1(strongly disagree) to 7(strongly disagree) scale. Items were averaged together to create index scores for the two beliefs, in which higher scores represented stronger endorsement of that belief.

Data Collection

To examine the robustness of the findings against possible variations by day of data collection (Casey, Chandler, Levine, Proctor, & Strolovitch, 2016), we chose days that we believed would be most different, psychologically, during the month when we collected the data. Specifically, Day 1 of data collection was Monday, January 16, 2017 (Martin Luther King Jr. Day), Day 2 was two days later on Wednesday, and Day 3 was four days after that on Sunday, two days after Donald Trump's inauguration.

On the one hand, if the results differ across these 3 days, this study will reveal the often overlooked possibility that day of data collection makes a difference. On the other hand, if the results are generally consistent across these days which contained days of relative significance for race relations, then that would suggest the findings are relatively robust across days of the week and relatively unaffected by specific social events.

Procedure.

Participants completed all measures online. All colorblind items were presented first, one at a time, randomized at the item level. After completing the colorblind items, the related scales were next presented, randomized at the scale level. Participants then completed demographics.

Results

The means and standard deviations for endorsement of each colorblind statement and results of analyses done separately by day of data collection are presented in Supplemental Materials 3.3.4. The majority of the results were consistent across all 3 days of data collection. Below, for all analyses, we report the results of the collapsed data, and make note of day-to-day differences where applicable. We also examined the possibility that ceiling and floor effects may be attenuating the correlations between these items and measures of race-related attitudes.

However, the magnitude of skewness of these items were unrelated to their correlations with measures of race-relevant attitudes.

We first replicated the finding that with principal axis factoring (again with MPlus, MLR, and varimax rotation), more than one latent factor fits the data significantly better than with just one latent factor (i.e., more than is expected from just the larger free parameters). The first three orthogonal factors accounted for 30.42%, 12.59%, and 4.17% of the variance, respectively.⁴ Per χ^2 , AIC, RMSEA, SRMR and the χ^2 difference test, increasing the number of factors improved model fit, usually substantially and always significantly (all $p < 10^{-7}$), up to 7 factors (see Supplemental Materials 2.4.1). Only BIC (which imposes a penalty for estimating more parameters) worsened, for models with 5 – 7 factors. We replicated these results in R (R core team, 2017) and the *fa* function in the *psych* package, again with varimax rotation and the ML estimator (Revelle, 2018), indicating that differences in software did not influence the results.

Analyses of the 22 items examined in Study 2a (preregistered replication). To replicate the findings of Study 2a, we formed an index variable representing each cluster identified in Study 2a by averaging the items in each predefined cluster, after standardizing each item. Then we computed correlations between this index variable and each of the 11 scales. The correlation results are presented in the first 3 columns of Table 2.

Table 2.

Study 2b correlations and correlation differences between cluster index scores and measures of relevant constructs, for White participants only (n = 282), pre-defined clusters

Pre-defined cluster	Cluster comparisons
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⁴ We predicted that among the 22 items included in Study 2a, fitting a model with 2 orthogonal factors would account for a significantly greater portion of the variance compared to a model with only 1 factor, with the two-factor model accounting for at least 10% more variance than a one-factor model. These predictions were confirmed.

	Cluster P1	Cluster P2	Cluster P3	P1 vs. P2	P1 vs. P3	P2 vs. P3
Assimilationism (4 items; Hahn et al., 2015, Wolsko et al., 2006)	.85***	-.17**	.35***	15.80***	12.34***	8.40***
Multiculturalism (4 items; Hahn et al., 2015, Wolsko et al., 2006)	.48***	-.35***	.02	10.30***	8.09***	6.02***
Symbolic Racism (8 items; Henry & Sears, 2002) ^a	.55***	-.30***	.07	10.72***	8.73***	5.93***
SDO– Group-Based Dominance (4 items; Ho et al., 2015)	.26***	-.18**	.08	5.17***	3.01**	4.13***
SDO– Opposition to Equality (4 items; Ho et al., 2015)	-.42***	.37***	.06	9.63***	8.15***	5.11***
External Motivations to Respond Without Prejudice (5 items; Plant & Devine, 1998)	.54***	.03	.29***	6.57***	4.83***	4.14***
Internal Motivations to Respond Without Prejudice (5 items; Plant & Devine, 1998)	-.44***	.27***	-.10	8.67***	6.09***	5.81***
Race-as-Informative Essentialism (4 items; adapted from No et al., 2008, and Williams & Eberhardt, 2008) ^b	.28***	-.28***	-.08	6.70***	6.07***	3.25***
Race-as-Fixed Essentialism (3 items; adapted from No et al., 2008, and Williams & Eberhardt, 2008)	.26***	.01	.15*	2.97**	1.77	2.33*
Opposition to Affirmative Action (6 items; Haley & Sidanius, 2006)	.73***	-.08	.34***	11.17***	8.25***	6.73***
Opposition to Racial Policy (6 items; Ho et al., 2012)	.68***	-.21***	.17**	11.73***	9.88***	6.01***

Note. *** $p < .001$, ** $p < .01$, * $p < .05$. Cluster comparisons are computed from transforming correlations from r -to- z , and testing the difference between the z -scores. The values in the left half are Pearson's r , the values in the right half are the Z difference scores between the two clusters' correlations with the given scale.

Of the 33 correlations computed (3 cluster index variables x 11 scales), we made strong preregistered predictions for 15 of them, and tentative predictions for 4 of them (see preregistration document, <https://osf.io/a7nfx/>). All 15 of the 15 strong predictions were confirmed. Of the 4 tentative theoretical predictions, 3 were confirmed. In addition, we predicted that 6 of the remaining correlations would be nearly 0 (i.e., $|r| < .15$). Of them, 5 were confirmed to be in fact smaller than .15 in magnitude. All predictions were confirmed using two-tailed tests with a cut-off of $p < .05$.

We also compared the correlations of each cluster with each scale (the differences in correlations presented in the last 3 columns of Table 2). For example, the first cell of the fourth column of Table 2 reports that the correlation between Cluster P1 and Symbolic Racism significantly differed from the correlation between Cluster P2 and Symbolic Racism. Thus, for each scale (e.g., Symbolic Racism), we made 3 correlation comparisons (i.e., Cluster P1 vs. P2, P1 vs. P3, and P2 vs. P3). As described in our preregistration document, we made strong directional predictions for 21 of the comparisons, and tentative, theoretical predictions for 5 of the comparisons. Of the 21 strong directional predictions, all 21 were confirmed. Of the 5 tentative theoretical predictions, all 5 were confirmed.

Taken together, and replicating Study 2a, these results indicate that for White participants, there are at least three distinct clusters of colorblind items that relate to the race-relevant attitude scales differently, and even in opposite directions at times.⁵ Specifically, Cluster P1 items correlate strongly and positively with Symbolic Racism, Opposition to Affirmative

⁵ Although most of the patterns reported held true when examining each day individually, there were some differences across day of data collection. However, these differences were not drastic. That is, they differed only in strength, and not direction, thus did not change the overall pattern of results. See Supplement Materials 3.2.1 for correlations split by day of data collection.

Action, Opposition to Racial Policy, SDO Dominance, and SDO Opposition to Equality ($r = .48$ to $r = .85$), and strongly and negatively with Internal Motivations to Respond Without Prejudice and Multiculturalism ($r = -.42$ to $r = -.44$).

In contrast, Cluster P2 items correlate negatively with Symbolic Racism, SDO Dominance, SDO Opposition to Equality, Race-as-Informative Essentialism, and Opposition to Racial Policy ($r = -.17$ to $r = -.35$), and positively with Internal Motivations to Respond without Prejudice and Multiculturalism ($r = .37$ to $r = .27$). As indicated in Table 2, the Cluster P1 and Cluster P2 correlations with all of the scales significantly differ from each other.

As predicted, items in Cluster P3 did not have consistent correlations with the race attitude scales. Cluster P3 items correlated slightly positively with Symbolic Racism, Opposition to Racial Policy, and Opposition to Affirmative Action ($r = .17$ to $r = .35$), but were mostly uncorrelated with the rest of the scales ($|r| < .15$). These correlations, too, significantly differed from both Cluster P1 and Cluster P2 correlations on every scale save for Cluster P1 vs. P3 correlations with Race-as-Fixed Essentialism ($p < .077$).

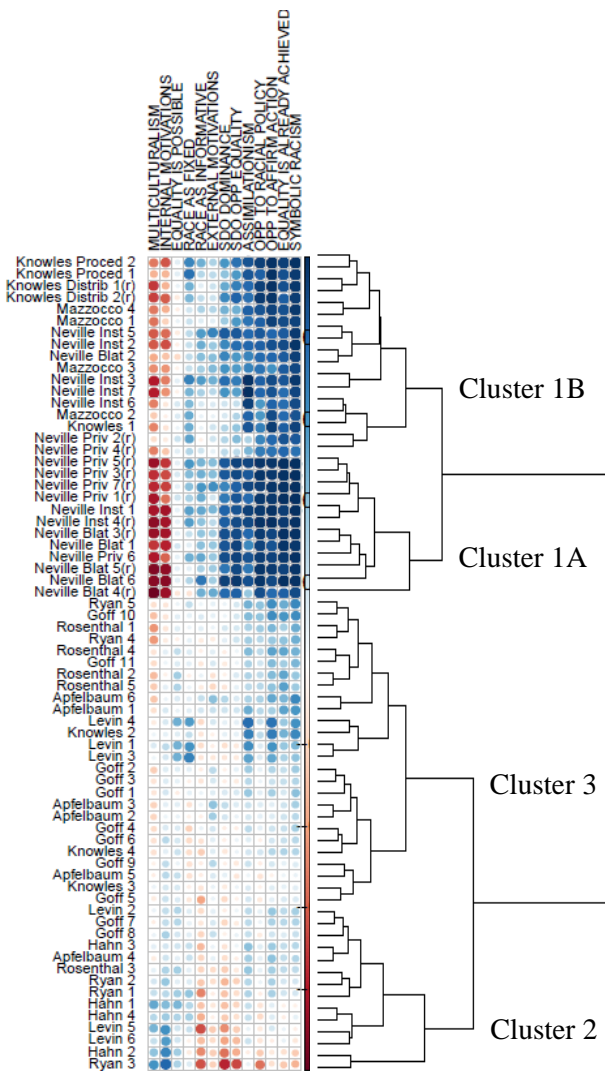
Analyses of all 69 items (exploratory analyses). To test whether similar clustering patterns occur when considering the full set of 69 colorblind items, we followed the same methodology as in Study 2a, and used a heatmap function in R (from the *corrplot* package) to hierarchically cluster the items based on their associations with the race-relevant attitude scales. To gain even more information for our clusters, we also included beliefs about the existence and intractability of inequality in our exploratory analyses.

The results are shown in Figure 2. Using the branches produced by the clustering algorithm, there appear again to be the same cluster structure of two meaningful clusters and a

third, for items without clear correlations with race relevant attitudes; however, with the addition of more items, it seems reasonable to subdivide the first cluster into 2 smaller clusters (Clusters 1A, 1B).

Figure 2.

Cluster analysis of 69 colorblind items based on their pattern of correlations with the 13 race-related attitude scales (White participants; Study 2b)



Note. Blue circles indicate positive correlations; red circles indicate negative correlations. Circle size and deepness of color reflect correlation strength, with larger circles and deeper color indicating strong correlations, and smaller, fainter circles indicating weak correlations. For illustration purposes, correlation values are transformed using a sigmoid function. For correlation values, see Supplemental Materials 3.2.1.

Items that cluster together, inter-item cluster correlations, and Cronbach's alphas are presented in Section 4 of Supplemental Materials. To gain insight into the most essential meaning of each cluster, items are listed from most representative to least representative of that cluster, based on the correlations between that item and the average of all the other items within that cluster (i.e., item-total correlation). For example, the item most representative of Cluster 1A is the reverse-coded *Neville_Privilege5* item "Racial and ethnic minorities do not have the same opportunities as White people in the U.S.", which shares the highest correlation with all other items in that cluster ($r = .83$), and the item most representative of Cluster 1B is the *Mazzocco4* item "Society would be better off if we all stopped talking about race", which shares the highest correlation with all other items in that cluster ($r = .76$). Table A in the Appendix lists the top 5 representative items for each cluster.

To understand the specific correlation patterns characteristic of each cluster, we created index scores for each of the 4 clusters by averaging items that fell within the same cluster. The first 4 columns of Table 3 display the correlations between cluster scores and scales. The last 6 columns of Table 3 display the differences in each cluster's association with the scales from other clusters' associations with the scales. For example, the difference in associations between Cluster 1B with Symbolic Racism and Cluster 2 with Symbolic Racism has a z -value of 14.06, $p < .001$.

Table 3.

Study 2b correlations and correlation differences between cluster index scores and measures of relevant constructs, White participants only (n = 282), exploratory clusters

Race-Relevant Constructs	Correlations				Z values for the difference between correlations					
	Cluster 1A	Cluster 1B	Cluster 2	Cluster 3	1A vs. 1B	1A vs. 2	1A vs. 3	1B vs. 2	1B vs. 3	2 vs. 3
Symbolic Racism	.88***	.79***	.06	.30***	5.24***	15.10**	13.41***	14.06***	12.42***	6.31***
SDO Dominance	.52***	.37***	-.24***	-.003	4.23***	9.86***	7.9***	9.79***	7.48***	6.28***
SDO Opposition to Equality	.60***	.42***	-.16**	.05	5.16***	10.05***	8.61***	9.37***	7.65***	5.36***
External Motives	.26***	.23***	-.08	.07	0.83	4.19***	2.69**	4.82***	3.06**	3.99***
Internal Motives	-.50***	-.29***	.28***	.08	5.74***	0.06***	8.71***	9.1***	7.43***	5.21***
Assimilationism	.56***	.62***	.16**	.25***	2.91**	4.82***	4.31***	8.03***	8.13***	2.4*
Multiculturalism	-.56***	-.40***	.17**	-.13*	4.76***	9.72***	6.81***	-9.23***	5.54***	7.97***
Race-as-Informative Essentialism	.31**	.23***	-.25***	-.04	2.23*	6.92***	4.98***	7.42***	5.12***	5.55***
Race-as-Fixed Essentialism	.22***	.32***	.12*	.04	2.76**	1.22	2.43*	3.26***	5.48***	1.88
Opposition to Affirmative Action	.73***	.73***	.14*	.29***	0.08	8.95***	8.05***	11.00***	10.61***	3.85***
Opposition to Racial Policy	.76***	.60***	-.07	.14*	5.62***	12.18***	10.93***	11.38***	10.07***	5.36***
Belief that equality is achieved	.82***	.64***	.07	.26***	7.24***	12.79***	11.55***	10.47***	9.02***	4.95***
Belief that equality is not possible	.08	.03	.21***	.14*	1.34	1.58	0.88	2.84**	2.24*	1.75†

Note. *** $p < .001$, ** $p < .01$, * $p < .05$. Comparisons of correlations were computed using the formula for comparisons of correlations from dependent samples (e.g., <http://quantpsy.org/corrttest/corrttest2.htm>).

As Table 3 shows, the clusters we call 1A and 1B are characterized by correlation patterns very similar to the patterns observed for Cluster P1 above. That is, both of these clusters show positive correlation with Symbolic Racism, Opposition to Racial Policy, Opposition to Affirmative Action, SDO Dominance, SDO Opposition to Equality, and Race-as-Informative Essentialism ($r = .23$ to $r = .79$), and negative correlation with Internal Motivations to Respond Without Prejudice and Multiculturalism ($r = -.29$ and $r = -.40$, respectively). However, these correlations are significantly stronger for Cluster 1A compared to 1B on most scales except Assimilationism and Race-as-Fixed Essentialism, which show stronger associations with Cluster 1B compared to 1A, and Opposition to Affirmative Action and External Motivations to Respond without Prejudice, which do not differ between Clusters 1A and 1B.

Cluster 2 is characterized by correlation patterns nearly opposite of those for Clusters 1A and 1B, and very similar to the patterns observed for Cluster P2 above, albeit weaker in strength. Namely, Cluster 2 is now uncorrelated with Symbolic Racism and Opposition to Racial Policy ($r = .06$ and $r = -.07$), though still negatively correlated with SDO Dominance, SDO Opposition to Equality, and Race-as-Informative Essentialism ($r = -.16$ to $r = -.25$), and positively correlated with Internal Motivations to Respond without Prejudice and Multiculturalism ($r = .28$ and $r = .17$, respectively). Cluster 2 correlations significantly differ from both Cluster 1A and Cluster 1B correlations with every scale, save for the correlations between Cluster 1A and 2 with Race-as-Fixed Essentialism ($p = .22$).

Lastly, although items in Cluster 3 probably do not represent a coherent construct because these items were grouped due to their lack of correlations with race attitude scales, we nonetheless proceeded to form an index variable by averaging these items. Not surprisingly, this index was not correlated with most of the scales ($|r| < .15$), save for small positive correlations

with Symbolic Racism, Opposition to Affirmative Action, and Opposition to Racial Policy ($r = .14$ to $r = .30$), and small negative correlations with Multiculturalism ($r = -.13$). Cluster 3 correlations again significantly differ from Cluster 1A, Cluster 1B, and Cluster 2 correlations for almost every scale.

Study 2b Discussion

Study 2b replicated the main findings observed in Study 2a, suggesting that it may be fruitful to consider two, or possibly three, distinct constructs among the 69 statements in how they relate to relevant race-related attitude scales.

Interpreting the clusters

Clusters 1A and 1B: “Racism denial” and “Avoid discussing race (to maintain the status quo)”. The first cluster is one that reflects the hierarchy-maintaining nature of colorblindness, which might be further broken up into two related, yet distinct, ideas.

The first subgroup within this cluster (Cluster 1A) appears to represent *racism-blindness*, or a *denial of the existence of current racism* (e.g., Bonilla-Silva, 2003; Neville, Awad, Brooks, Flores, & Bluemel, 2013). Statements in this cluster include “Racial and ethnic minorities do not have the same opportunities as White people in the U.S.” (reverse-coded) and “White people in the U.S. have certain advantages because of the color of their skin” (also reverse-coded). This cluster of statements is strongly and positively related to race bias, anti-egalitarianism, the belief that minorities should assimilate to U.S. culture, the belief that race is indicative of internal traits and abilities, and opposition to policies intended to break down hierarchy (e.g., affirmative action, government assistance to racial minorities). In addition, this cluster is strongly and negatively associated with multicultural beliefs, and internal motivations to be unprejudiced.

Out of all the clusters, this sub-cluster shows the strongest associations with racial prejudice, anti-egalitarianism, and opposition to race-conscious policy.

The second subgroup within this cluster (Cluster 1B) shows similar associations with the race-relevant attitudes and beliefs, but emphasizes *avoiding discussing race (in order to maintain status quo)*. This sub-cluster includes items that *prescriptively* call for an end to discussion of race, with a particular emphasis against the consideration of race in policy (e.g., “Society would be better off if we all stopped talking about race” and “The same rules and regulations should apply to all groups regardless of their race, even if that means existing racial inequalities continue”). This is in contrast to Cluster 1A, which is more *descriptive* in nature, stating that current society is *already* “blind to color”.

The correlations with the race-relevant attitude scales of this cluster are slightly weaker compared to those of the *racism denial* cluster. This may be because some who believe we should avoid discussion of race believe it is the truly egalitarian thing to do. Given the overall strength of correlations, however, it is likely that most of those who endorse *avoid discussing race* colorblindness are driven by anti-egalitarian, hierarchy-maintaining motivations (e.g., Chow & Knowles, 2016; Knowles et al., 2009; Mazzocco et al., 2011; Neville et al., 2000).

Cluster 2: “Deep down, we are all the same” or affirmation of common humanity

The next grouping tells a very different story. This group of items emphasizes *focusing on our common humanity, in hopes of achieving intergroup harmony*, stating that we are all human and fundamentally the same inside (e.g., “At our core, all human beings are really the same, so racial and ethnic categories do not matter”; Cluster 2). This cluster shows nearly completely opposite associations from the first major grouping for many of the important

measures: it is unassociated with race bias and support for race-conscious policy, positively associated with greater internal motivations to be unprejudiced and endorsement of multiculturalism, and negatively associated with anti-egalitarianism and the belief that race is indicative of internal traits and abilities.

It is interesting to note that this cluster of statements is positively correlated with endorsement of multiculturalism and uncorrelated with support for race-conscious policy. In other words, some individuals who endorse the *common humanity* cluster also endorse multiculturalism and race-conscious policy—both of which require attention to group categories and are typically considered to be opposed to “colorblindness” (cf. Hahn et al., 2015; Morrison et al., 2011). The patterns observed in this cluster suggest that for a substantial number of participants, endorsing the idea that “we are all human, so we are all the same” can coexist along with a respect for cultural diversity and support for race-conscious policy.

Items without clear relations with race-relevant attitudes

The remaining items are characterized by the absence of clear relations with race-relevant attitudes and beliefs. The wording of the statements in this cluster are broad and general, and consist of statements that simply *oppose racial categorization*, such as “Seeing people in terms of race breeds interracial mistrust and prejudice” and “All human beings are individuals, and therefore race and ethnicity are not important”.

This cluster of statements seems to reflect the ambiguity of the colorblind concept as a whole. A general call to remove focus from race could mean many different things when made as a statement alone (Babbitt et al., 2016; Purdie-Vaughns et al., 2008; Rattan & Ambady, 2013). For instance, the statement “race is not important” could be said with the intention to maintain

hierarchy and deny racial inequality, or with the intention to speak against stereotyping and race-based prejudice (Levy et al., 2005; Knowles et al., 2009). Thus, those who endorse statements that merely oppose racial categorization can come from all camps: they can be endorsed with *racism denial*, *avoid discussing race in order to maintain status quo*, or *emphasizing common humanity to achieve intergroup harmony* in mind.

Study 3: Do these colorblind distinctions predict different behavioral intentions?

Studies 1, 2a, and 2b suggested that there are at least two meaningful, orthogonal, and psychologically distinct constructs within existing colorblind measures, one of which may be further divided into two different aspects of the construct, with clearly different patterns of associations with multiculturalism, SDO, and support for race-conscious policy. But do these differences in associated attitudes translate into differences in how they relate to relevant *behaviors*? Some evidence suggests that attitudes do not necessarily result in their corresponding behaviors (Van de Vijver, Breugelmans, & Schalk-Soekar, 2008; Yogeeswaran & Dasgupta, 2014).

In Study 3, we tested whether endorsement of the distinct clusters of colorblind statements identified in Study 2b predict different behavioral intentions. Given that Study 2b found that the distinctions were most clear and robust for White participants, in this preregistered study (<https://osf.io/yz36c/>), we focused on predicting behavioral intentions for White participants only.

We examined behavioral intentions toward two types of outcomes relevant to the goals of improving intergroup relations: *interracial interaction* outcomes, and outcomes that more directly affect *structural* change (Vorauer & Quesnel, 2016; Dovidio, Gaertner, & Pearson, 2016). Specifically, with respect to *interracial interaction* outcomes, we examined willingness

and comfort interacting with racial minorities. We also included an alternative measure of race bias from what was used in Studies 2a and 2b, to assess racial bias against different minority groups.

The outcomes that more directly affect *structural* change included voting for race-conscious policy, prioritizing race issues in the federal budget, and donating money to organizations that support racial minorities. These were included because research suggests that majority group members who may be willing to support diversity efforts when the goal is for *interpersonal* harmony (i.e., getting along better) may be less willing to support diversity efforts when the goal is to challenge existing *power* differences (i.e., voting for hierarchy-attenuating policy, discussing power differences; Saguy et al., 2008; Dixon, Durrheim, & Tredoux, 2005, 2007; Gaertner et al., 2016; Banfield & Dovidio, 2013).

Because even the most representative items of each cluster still contained information tangential to what we believed were the key beliefs underlying these clusters—which were based on the *gestalt* meaning gleaned from item content as well as associations—we tested our interpretation of the main clusters by writing items to capture what we believed were the *core* meanings underlying each cluster. We first examined the convergent and divergent validities of these items by examining the pattern of their correlations with the existing items representing those clusters (Study 3a). Then we used these new items in Study 3b, and preregistered our predictions (<https://osf.io/yz36c/>) based on pilot results (see Supplemental Materials Section 5).

Study 3a

Study 3a sought to examine convergent and discriminant validity of items written to represent the three main clusters.

Method

Participants

One hundred seventy seven self-identified White MTurk workers (79 females, 98 males; $M_{\text{age}} = 38.56$, $SD_{\text{age}} = 11.34$) were recruited for this study.

Materials

Colorblind statements. Two statements were created to represent what we believed were the core meaning of each colorblind construct by examining the top 5 most representative statements representing each construct, and writing two statements that captured the essential meaning of the construct. Participants rated each item on a 1 (strongly disagree) to 7 (strongly agree) scale. See Table A in the Appendix for item wording.

Participants also rated agreement with the 5 most representative items of *racism denial* ($\alpha = .92$), *avoid discussing race* ($\alpha = .85$), and *common humanity* ($\alpha = .86$). Our interpretation of the three main clusters of colorblind items would be supported if the newly written “core” items correlate strongly with the clusters of existing items to which they correspond, but less strongly with other clusters.

Procedure

To validate the new items created to represent the 3 constructs, participants completed an online survey in which they rated their agreement on the 15 existing statements representing each cluster, as well as the new items created to capture the essential meaning of each construct. The order in which the items appeared was completely randomized.

Results and discussion

Table 6.2.1 in Supplemental Materials presents the correlations between the existing items representing each construct and the “core” items for each construct. Strong correlations with items in the corresponding clusters (median $r = .78$) and moderate to weak correlations

(median $r = .32$) with the other clusters suggest support for the convergent and discriminant validities of these items.

In addition, the core items for each construct related to the core items of the other constructs in the same way as they related in Study 2. As shown in Table 6.2.2 in Supplemental Materials, *racism denial* was positively correlated with *avoid discussing race* ($r = .56$), and uncorrelated with *common humanity* ($r = -.05$). *Common humanity* was positively correlated with *avoid discussing race* ($r = .27$), and uncorrelated with *racism denial*.

Study 3b: Do the colorblind distinctions predict race-relevant behavioral intentions?

Method

Participants.

Two hundred twenty White MTurk workers were recruited to examine how these new items related to the race-relevant outcomes. After excluding participants who missed the embedded attention check, spent less than 10 years in the U.S., or were not self-identified White, 199 participants with useable data remained ($M_{age} = 39.65$, $SD_{age} = 12.24$; 104 female, 94 male, 1 other).

Measures.

Colorblind statements. We used the 6 core colorblind items that were validated in Study 3a.

Multicultural Statements. To test how endorsement of these 3 clusters compare to a relevant but different ideology, participants also rated their agreement with 5 multiculturalism statements. The multicultural statements chosen for this study were based on a factor analysis of 3 multiculturalism scales conducted by Rosenthal & Levy (2012). We included the top 5 loading items, drawn from 3 multiculturalism scales, and averaged them together to create an index score

representing endorsement of multiculturalism (see Supplemental Materials; *multiculturalism* alpha = .85)

Outcome DVs. We included the following several measures to capture both *interracial interaction* outcomes and *structural change* outcomes.

To measure *interracial interaction* intentions, we included a scale that assesses participants' willingness to engage with Black individuals (adapted from Yogeeswaran & Dasgupta, 2014; Esses & Dovidio, 2002; Tropp & Bianchi, 2006), and a scale assessing participants' comfort and expectations in interracial interactions (Apfelbaum et al., 2016). Items included "I feel anxious about interacting with someone of a different race" (reverse-scored) and "I am confident that people from other racial backgrounds will like me", and were rated on a 1 (strongly disagree) to 7 (strongly agree) scale. Items within each scale were averaged together to create an index score representing greater willingness to engage with Black individuals (alpha = .96) and greater comfort and interest in interracial expectations (alpha = .82).

For behavioral intentions that more directly affect *structural change*, participants were (1) given the chance to apportion bonus money to an organization helping racial minorities (adapted from Freeman, Aquino, & McFerran, 2009), (2) prioritized the importance of addressing race bias compared to other issues, thus resulting in it being cut or kept as a program in the budget (adapted from Chow & Knowles, 2016), and (3) voted on several race-conscious policies (e.g., voting for mandatory cultural education, funding intercultural exchange community centers, banning consideration of race in school admissions, and funding community health clinics in medically underserved communities which often served communities of color) (adapted from Wolsko et al., 2006). To mask the true purpose of the study, each of these race-relevant options were randomized within other race-neutral options. See Supplemental Materials

(sections 5.3 and 7.2) for complete descriptions of each measure. Items were coded such that higher scores indicated (1) more money apportioned to an organization supporting racial minorities (e.g., *Scholarships for Minorities*), (2) lower priority for addressing race bias in the budget, and (3) greater confidence in a yes vote for each policy.

To capture racial bias toward different ethnic groups, participants completed feeling thermometers for Blacks, Latinos, and Asians, as well as Whites.

Procedure.

Participants completed an online survey that was organized into blocks. In one block, participants allocated their potential bonus money, decided on programs to cut from the budget, and voted on different policies. These three measures were presented in fixed order, but the individual choices within each measure were presented in randomized order. In another block, participants rated their agreement with the 6 core colorblind and 5 multicultural statements, presented individually, and in randomized order. In the third block, participants completed, in randomized order, feeling thermometers for various social groups, indicated their willingness for intergroup contact, and interracial interaction intentions and expectations. Finally, participants completed demographics. The order in which the different blocks (i.e., colorblind endorsement block, structural change block, and interracial interaction block) appeared was randomized. We counterbalanced the order of the measures, so that half the participants completed their endorsement of colorblindness first, and half completed the behavioral intention measures first.

Results

Table 7.3.2 in Supplemental Materials provides descriptive statistics for all outcome measures. The majority of participants (84.4%) did not volunteer to do additional tasks for any

policy initiative, leaving the number of participants who were interested in doing an additional task too low to draw conclusions from. We thus excluded this measure in subsequent analyses.

Correlation coefficients are reported in Table 4. For the results of race-neutral control measures, see Supplemental Materials 7.3.3.

Table 4.

Study 3b correlations between colorblind endorsement and race-relevant DVs.

	Correlation coefficients (pearson's r)			Correlations controlling for endorsement of the other colorblind clusters		
	Racism denial	Avoid discussing race	Common humanity	Racism denial	Avoid discussing race	Common humanity
Race-relevant DVs						
<i>Winnings allocation (proportion out of total amount donated to any charity, n = 106)</i>						
Scholarship for Minorities	-.33***	-.43***	-.24*	-.07	-.23*	-.07
<i>Budgeting priorities (rank data, higher value = lower priority)</i>						
Bias against racial minorities	.59***	.52***	-.09	.26***	.26***	-.20**
<i>Voting intentions (positive = support for policy)</i>						
Ban Consideration of Race policy	.33***	.46***	.11	.03	.31***	-.05
Mandatory Cultural Education policy	-.47***	-.42***	-.09	-.25***	-.13†	-.02
Intercultural Exchange Centers policy	-.38***	-.34***	-.07	-.20**	-.11	-.01
Community Health Clinics policy	-.45***	-.33***	.10	-.24***	-.13†	.15*
<i>Additional tasks (binary choice, 0 = no, 1 = yes)</i>						
Ban Consideration of Race policy	.05	.09	.03	-.01	.08	-.01
Mandatory Cultural Education policy	---	---	---	---	---	---
Intercultural Exchange Centers policy	-.02	-.10	.007	.07	-.13†	.07

Community Health Clinics policy	.03	-.03	-.05	.04	-.04	-.03
<i>Outgroup warmth (positive = pro-white bias)</i>						
Pro-white vs. Black bias	.41***	.32***	-.22**	.16*	.21**	-.29***
Pro-white vs. Latino	.37***	.37***	-.09	.11	.24***	-.19**
Pro-white vs. Asian bias	.30***	.26***	-.10	.11	.16*	-.17*
<i>Interracial interaction intentions</i>						
Willingness to interact	-.32***	-.18*	.39***	-.12	-.17*	.42***
Interracial interaction intention and expectations	-.11	-.003	.36***	-.02	-.09	.36***

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. The last three columns represent the unique contribution of that colorblind cluster in predicting the DV (i.e., semi-partial correlations). Table reports race-relevant measures only. For all measures, see Supplemental Materials 7.3.3.

As predicted (<https://osf.io/yz36c/>), endorsement of *racism denial* and *avoid discussing race* was negatively associated with willingness to interact with Black people ($r = -.18$ and $r = -.32$, p 's $< .05$), and positively associated with bias against Blacks, Latinos, and Asians ($r = .26$ to $r = .41$, p 's $< .001$). In addition, endorsement of these clusters was negatively associated with donating to charities that support racial minorities ($r = -.33$ to $r = -.43$, p 's $< .001$), addressing race bias in the budget, ($r = -.52$ to $r = -.59$, p 's $< .001$) and voting for race-conscious policy (i.e., they were positively associated with voting for race-blind policy; $r = -.33$ to $r = .47$, p 's $< .001$)⁶.

To explore whether *racism denial* and *avoid discussing race* uniquely predicted different outcomes, and to see if the *common humanity* cluster was more than simply the opposite of *racism denial* and *avoid discussing race*, we computed the same correlations while controlling for endorsement of the other clusters. Results showed that *racism denial* and *avoid discussing race* play some unique roles in their associations with some of the outcome measures. For

⁶ We assumed that a participant voting against race-blind policy was for race-conscious policy, and a participant voting against race-conscious policy was for race-blind policy, because the very existence of the proposal suggests that the current state of affairs is one that is currently contrary to what the policy proposes.

instance, *racism denial* uniquely contributes to the associations with voting against race-conscious policy (e.g., mandatory cultural education, funding health clinics, funding intercultural exchange centers), but *avoid discussing race* uniquely contributes to the associations with voting for colorblind policy (e.g., banning consideration of race in school admissions), donating to charities, pro-white bias, and willingness to interact with Blacks.

Endorsement of *common humanity* revealed distinctly different and sometimes opposite correlations to those of *avoid discussing race* and *racism denial*. For example, *common humanity* endorsement was negatively related to bias against Blacks ($r = -.22, p < .01$), positively related to willingness and comfort interacting with minorities $r = .39$ and $r = .36, p < .001$), and unrelated to the measures addressing structural change ($r = -.07$ to $r = .11, ns$). When we controlled for *racism denial* and *avoid discussing race*, endorsement of *common humanity* was positively associated with support for some structural outcomes such as prioritizing addressing race bias in the budget and support for funding health clinics in areas serving people of color ($r = .20$ and $r = .15, p < .05$, respectively), negatively associated with bias against all 3 ethnic groups ($r = -.17$ to $r = -.29, p$'s $< .05$), and strongly positively associated with the interpersonal DVs ($r = .36$ and $r = .42, p$'s $< .001$).

We also examined correlations between the DVs and endorsement of *multiculturalism* as a way to validate those behavioral intention measures (see Supplemental Materials 7.3.4 for those results). As expected, support for *multiculturalism* was positively related to support for all race-relevant structural change and interracial interaction intentions, and negatively related with outgroup bias.

Thus, as predicted, the three main colorblind beliefs predict distinct behavioral intentions—both structural and interpersonal—and in diametrically opposite directions—especially for the DVs involving interpersonal comfort and outgroup warmth.

Study 3 Discussion

Study 3 found that the colorblind clusters identified in Study 2b predicted different behavioral intentions that are of consequence for intergroup relations. Specifically, using items written specifically to capture the gist of each cluster that was identified in Study 2b, and validating them in a separate sample, results showed that those who endorsed *racism denial* and *avoid discussing race* were more likely to oppose efforts for structural change, were more likely to have bias against Blacks, Latinos, and Asians, and were less interested and willing to interact with Black people. Interestingly, although *racism denial* and *avoid discussing race* both opposed race-conscious structural change and interracial interactions, they each played unique roles in predicting different behavioral intentions, lending support for the case that the two beliefs—though related—represent meaningfully distinct constructs.

In contrast, those affirming *common humanity* showed clearly different associations from *avoid discussing race* and *racism denial* on all measures, and even in diametrically opposite directions with regard to bias against Blacks and interracial interaction intentions. Specifically, endorsement of *common humanity* was unassociated with behavioral intentions for structural change, but positive in terms of warmth toward Blacks and interest in interacting with minorities, and when we controlled for *racism denial* and *avoid discussing race*, affirming *common humanity* was positively related to race-conscious policy support as well. Thus, it appears that the egalitarian and multicultural attitudes associated with *common humanity* that were observed

in Study 2 may sometimes translate to positive interracial interaction intentions, but not necessarily into efforts for structural change.

Study 4: Exploring an underlying reason for the colorblind distinctions

Study 3 provided further evidence that an *emphasis on common humanity* is distinct from *avoid discussing race* and *racism denial*. Considering that all of these beliefs call to minimize attention to race, why is it that they behave so differently?

One way to understand the distinctions among “colorblind” statements that arose from the current research (and the one we pursue in this work) may be in the difference between minimizing attention to *essentialist*⁷ views of race — a view that argues that race is a biologically predetermined and defining aspect of human nature, determining everything from intelligence and ability to personality and interests (Andreychik & Gill, 2014; Rothbart & Taylor, 1992; Yzerbyt, Corneille, & Estrada, 2001, Haslam et al., 2000, 2002; Bastian & Haslam, 2006; Hong, Chao, & No, 2009) — versus minimizing attention to the *social realities* of race – which views race as a product of a society structured to systematically benefit some groups over others (Markus & Goya, 2010; Smedley & Smedley, 2005).

For example, *common humanity* beliefs state that deep down, all humans are fundamentally the same, and that there are no innate, meaningful differences between racial groups. Such beliefs do not necessarily speak to any *social* aspects of race, but instead deny the validity of *essentialist* beliefs about race, thus challenging justifications for racial stereotypes and prejudice, and resulting in more egalitarian attitudes and behaviors. In contrast, those who

⁷ There are many definitions of essentialism, and the exact components involved are debated. However, an underlying theme throughout the essentialism literature is the idea of race as a biological reality/entity that explains racial differences in phenotype as well as behavior, resulting in the justification of racial stereotypes and differences in status. In this paper, we do not enter the debate about what essentialism *is*, but focus on the particular aspect of essentialism that says a person’s race is innate, discrete, and informative of their internal traits and ability (i.e., we focus on the *bio-behavioral* aspect that is discussed in Andreychik & Gill, 2014).

endorse *racism denial* and *avoid discussing race* do not necessarily deny essentialist beliefs about race, but rather deny or ignore the presence of *racial prejudice* and *discrimination*, which are important *social realities* of race. Such beliefs deny the very real race-based social experiences racial minorities face, the identities that arise from those experiences, and helps maintain existing inequalities. Note that, conceptually, these ways of thinking about race are independent of one another (e.g., belief in race as an essential entity is independent of whether one believes race is a social reality).

To set up the theoretical framework on which Part 2 is based, Study 4 tests the hypothesis that the *racism denial* and *avoid discussing race* are ideas that minimize race as a *social reality*, while affirmation of our *common humanity* is an idea that aims to minimize race as an *essential, biological entity*. Identifying the aspect of “race” that each idea addresses may explain why the former two are more associated with anti-egalitarian attitudes and the latter more egalitarian attitudes.

Method

Participants

177 MTurk workers who self-identified as White (79 female, 98 male; $M_{\text{age}} = 38.55$, $SD_{\text{age}} = 11.34$) participated in an online study in exchange for \$1.75.

Measures

“Colorblind” varieties. This study also used the same 6 items written used in Study 3 to capture the “core meaning” of each of the three clusters of items identified in Study 2. All items were rated on a 1 (strongly disagree) to 7 (strongly agree) scale. The two items representing each cluster were averaged together to create an index score indicating endorsement of that “colorblind” meaning.

Race as an essentialized entity. To focus on the particular aspect of essentialism that says a person's race is informative of their internal traits and ability, we used the bio-behavioral essentialism subscale from Andreychik & Gill (2014), and No and colleagues (2008), and created 4 additional items based on our own synthesis of the literature. Items from the first two scales included "Differences in the life trajectories (e.g., education, careers) of African-Americans versus Whites can be understood in terms of the different underlying biology of the races", and "To a large extent, a person's race biologically determines his or her abilities and traits". Items we created included "The color of someone's skin can't tell you anything about a person's interest, ability, intelligence, or personality" (reverse-coded). All items were rated on a 1 (strongly disagree) to 7 (strongly agree) scale, and recoded such that all items were scored in the same direction. Items were then averaged together by their respective scales such that higher scores represented stronger endorsement of *race as an essentialized entity* (Andreychik & Gill alpha = .80, No et al. alpha = .73, ours alpha = .77). See section 8.1 of Supplemental Materials for the full list of items.

Race as a social reality. To capture race as the social realities that arise from social and historical conditions, we consulted the relevant literature (Smedley & Smedley, 2005; Markus, Steele, & Steele, 2000; Markus & Moya, 2010) and pulled sentences and ideas out of those texts. Six items represented race-as-a-social reality (e.g., "Race is no longer an important part of how people think of themselves," (reverse coded) and "There are significant differences in the local worlds experienced by racial minority and non-minority groups"). All items were rated on a 1 (strongly disagree) to 7 (strongly agree) scale, and recoded and averaged together such that higher scores reflected stronger beliefs in *race as a social reality* (alpha = .90). For the wording of all six items, see section 8.1 of the Supplemental Materials.

Procedure

Participants completed this survey online. All items were presented one at a time, in randomized order.

Results

Correlations between the different types of colorblind beliefs and the *social reality* vs. *essentialized entity* conceptualizations of race are presented in Table 5. As predicted, *racism denial* and *avoid discussing race* were negatively correlated with statements that conceptualize race as a *social reality* ($r = -.49$ to $r = -.85$, p 's $< .001$), and *common humanity* was negatively related to conceptualizations of race as an *essentialized entity* ($r = -.20$ to $r = -.37$, p 's $< .01$). Importantly, *racism denial* and *avoid discussing race* were *positively* associated with conceptualizations of *race as an essentialized entity*, and *common humanity* was *not* associated with conceptualizations of *race as a social reality*, thus providing support for our theoretical reasoning behind the distinctions between colorblind ideas.

Table 5.

Correlations between the 3 main colorblind constructs and our proposed theoretical framework explaining the distinctions.

	Correlations					
	Racism denial 1	Racism denial 2	Avoid discuss 1	Avoid discuss 2	Common humanity 1	Common humanity 2
Race as an essentialized entity (items we created; 4 items)	.27***	.15*	.20**	.17*	-.27***	-.37***
Race as an essentialized entity (Andreychik & Gill, 2014; 4 items)	.25**	.16*	.25***	.29***	-.27***	-.32***
Race as an essentialized entity (No et al., 2008; 8 items)	.30***	.19**	.23**	.27***	-.20**	-.30***
Race as a social reality (6 items).	-.85***	-.83***	-.55***	-.49***	.11	.05

* $p < .05$, ** $p < .01$, *** $p < .001$. Bolded items represent the correlations predicted to be highest for each column.

Study 4 Discussion

As predicted, the results of this study suggest that one potential underlying difference between the different clusters of colorblind beliefs is the conception of “race” that the message is attempting to minimize—the *racism denial* and *avoid discussing race* clusters aim to minimize attention to the *social realities* of race, while the *common humanity* cluster does not speak to the *social realities* of race but instead aims to dispel notions of race as an *essentialized entity*.

PART 1 DISCUSSION

Across four studies, we found that beliefs that call for less attention to race—which are typically treated as representing one monolithic construct of colorblindness—may be better understood as consisting of multiple constructs. Using Principal Axis Factoring on a comprehensive set of items from published measures of colorblind ideology, Study 1 found that a model with more than one latent orthogonal factors fits significantly and substantially better than a model that assumed only one latent factor. Studies 2a and 2b suggested at least two, possibly three, meaningful and conceptually distinct clusters within colorblind items, each with different patterns of association with various race-relevant attitude constructs (e.g., racial prejudice, preference for hierarchy, multiculturalism, and opposition to race conscious policy). Study 3 found that these clusters were related very differently to a variety of distinct behavioral intentions, including voting for race-conscious policy, cutting budget for programs designed to address race bias, and donations toward organizations that support racial minorities, as well as willingness and comfort engaging in interracial interactions. Finally, Study 4 suggested that one underlying difference between the main clusters of beliefs are in how “race” is conceptualized: One cluster of beliefs calls for minimizing attention to race as a part of the current *social* reality, while another calls for minimizing attention to race as an *essentialized* entity.

Diversity in “Colorblind” Belief

Based on item content as well as associations with other race-relevant beliefs and attitudes, we inferred the meaning behind each cluster. The first cluster—which further split into 2 related yet distinct sub-clusters—appears to reflect a belief that racism is no longer a problem, and a belief that people should avoid discussing race (where discussing race can disrupt the status quo). The former is *descriptive*, in that it is about the state of the world now, and the latter is *prescriptive*, in that it is about how people should behave. These 2 clusters, though distinct in meaning, were both associated with greater prejudice, anti-egalitarianism, opposition to multiculturalism and race-conscious policy. Further, endorsers of these beliefs opposed race-conscious efforts for structural change, and both were uncomfortable and unwilling to engage in interracial interactions.

The *racism denial* version of colorblindness appears most related to how colorblindness is conceptualized and operationalized in studies from counseling psychology (see Neville et al., 2013 for a review). *Avoid discussing race* appears related to it, but seems best represented in research in social psychology (Knowles et al., 2009; Mazzocco et al., 2011; Plaut, 2014). Although they differ in that one is descriptive while the latter is prescriptive, they are both consistent with a desire to maintain the status quo and minimize attention to the *social realities* of race—whether that is through denying the fact that race impacts people’s lives currently, or that society should stop paying attention to the social realities of race.

The *affirmation of our common humanity* cluster was associated with less prejudice, greater egalitarianism, and support for multiculturalism. Those who endorsed *common humanity* were just as likely to vote for race-conscious policy as vote against it. However they were associated positively to interracial interaction intentions and greater outgroup warmth.

It is notable that *common humanity* was positively correlated with endorsement of multiculturalism, and not negatively correlated with support for structural change. This means that participants who endorse *common humanity* tend to have greater appreciation for different cultural groups, and may (or may not) support race-conscious policies. That is, endorsement of this version of “colorblind” belief does not necessarily imply racism denial, or an interest in maintaining hierarchy, or a devaluing of minority cultures.

This coexistence may be explained by the fact that emphasizing common humanity minimizes race as an *essentialist* entity, arguing that there is no gene for race, humans are not fundamentally different from each other, and that differences between races are not due to innate biological difference—all of which can still allow for acknowledgement of the *social* realities of race, such as the fact that being considered a given race in society can give rise to different experiences and identities.

This *affirmation of our common humanity* belief may be what was captured in studies that showed egalitarian, multicultural associations with colorblindness (e.g., Hahn et al., 2015; Knowles et al., 2009; Levin et al., 2011; Morrison et al., 2011; Wolsko et al., 2000). However, given that the *common humanity* associations with egalitarian attitudes and behaviors are not clear-cut or strong, we caution against promoting this belief before further research into how it functions in different people and in different contexts. For example, such a message that de-emphasizes essentialist differences between races may only be effective when *also* allowing for acknowledgment of the *social* realities of race (Saguy et al., 2008, Banfield & Dovidio, 2013).

We also identified a cluster of items that appears to reflect just a general *opposition to racial categorization*, which does not represent any meaningful cluster, but grouped together only because they were all ambiguous in meaning, as evidenced by their lack of clear

associations with any of the other measures. These types of statements appear to be the more ambiguous version of colorblind belief— simply opposing racial categorization without specifying whether one intends it as a *racism denial* or to *avoid discussing race*, or as an *affirmation of our common humanity*. Such statements may be more open to different interpretations, with opposite relations with race-relevant attitudes and beliefs. As an intergroup ideology, *why* one opposes racial categorization is likely an important part of the story, rather than simply whether one is in favor of categorization or not (Park & Judd, 2005; Hahn et al., 2015).

Together, these findings suggest that research on the role of colorblindness may be able to achieve greater clarity by distinguishing among different clusters of colorblind beliefs. Given these findings, researchers may wish to measure different clusters of colorblindness separately in their studies. We provide items that exemplify each cluster in Table A of the Appendix for potential use in future research (see Supplemental Materials Section 4 for the full list). However, more research is needed to draw definitive conclusions about the nature of multiple clusters of colorblind beliefs. In the meantime, we suggest that when examining colorblindness, researchers report the results at the item-level in addition to, or rather than, preemptively aggregating them into a scale, so that the scientific community can accumulate more information about the "behavior" of these items, and arrive at an even more informative grouping of items than the ones shown in the present paper.

One potential constraint on the generality (Simons, Shoda, & Lindsay, 2017) of the findings in Part 1 is that all of them were based on MTurk samples. Future work should examine how colorblind ideas may be interpreted differently in groups whose demographics differ from that of Mturk workers. For example, people from different socioeconomic backgrounds may

differ in the extent to which they believe that race plays a role in their lives. Groups may differ in their awareness of systemic racial inequality in society and may thus differ in the extent to which they think of colorblindness as a purely interpersonal phenomenon, for example. In that case, the meanings of the different colorblind statements may differ.

In addition, the outcome measures we tested in Part 1 only constituted behavioral *intentions*. Although the perceived reality of those behavioral intentions were arguably very real in the minds of the participants (e.g., they believed they were allocating real bonus money), future research should examine how the colorblind clusters relate to actual voting behaviors, actual donations to charities, and behaviors in live interracial interactions.

PART 2: HOW DO RACIAL MINORITIES PERCEIVE SOMEONE WHO EXPRESSES A COLORBLIND BELIEF? IT DEPENDS.

Part 1 reveals distinctions in terms of the way colorblind ideology is *endorsed*. However, it is unknown whether these distinctions in colorblind meanings have any real significance to someone *observing* or *interacting* with the colorblind endorser. In Part 2, we examine how people who endorse or express these different “colorblind” beliefs are perceived by others. That is, it is possible that regardless of the underlying psychological characteristics associated with endorsement of a colorblind belief, those who express it may be perceived in ways that do not correspond to the endorsers' goals and values (e.g., as prejudiced).

There is reason to believe that expression of a colorblind idea can be met with reactions unintended by the one expressing the belief. For instance, spoken word artist Prince EA received some positive reaction for his song “I am not black, you are not white”, in which he urges people to move away from labels which serve to divide us, and to see that who we truly are is deep down inside (Peltier, 2015). However, Justin Timberlake’s response to an accusation of appropriating black culture with “Oh you sweet soul; the more you realize that we are the same,

the more we can have a conversation” was met with public outrage (Park, 2016). On the surface, the two appear to be communicating similar messages—that race is a superficial quality and that society should downplay its emphasis on race. So why such divergent reactions?

Existing research does not provide a complete answer. For example, although research shows that the same statement can shift meaning to suit one’s needs (Knowles et al., 2009), or can be endorsed with different meaning depending on whether one is a racial minority or majority (Levy et al., 2005), it does not directly explain the divergent effects on *perceivers*, or why a colorblind expression elicits negative reaction in one situation, and positive reaction in another.

Other evidence suggests that the *context* in which the colorblind approach is used can influence the way in which the approach is received (Apfelbaum, Sommers, & Norton, 2008; Apfelbaum, Grunberg, Halevy, & Kang, 2016; Purdie-Vaughns, Steele, Dittmann, & Randall-Crosby, 2008). For instance, when race is relevant to the task, a White person who avoids mentioning race is perceived as prejudiced, but when race is not relevant to the task, they are perceived as unprejudiced (Apfelbaum et al., 2008). If a workplace has low minority representation at the organization and has a colorblind diversity statement, racial minorities feel distrust and discomfort, but if the same diversity statement is paired with high minority representation, racial minorities feel trust and comfort (Purdie-Vaughns et al., 2008). In addition, when societal prejudice is perceived to be blatant and intentional, an approach that minimizes race is perceived to be more effective in achieving equality. However, if societal prejudice is subtle and unintentional, an approach that draws attention to race is perceived to be more effective (Apfelbaum et al., 2016).

Although these works suggests context plays a role in how a colorblind approach is received, these studies examine colorblindness as an avoidance of mention of race (e.g., Apfelbaum et al., 2008), as an organizational diversity statement (Purdie-Vaughns et al., 2008), or in terms of its perceived feasibility (Apfelbaum et al., 2016). Currently untested is the perception of *individuals expressing* colorblind beliefs, which, as illustrated in the anecdote above, is arguably just as relevant for intergroup relations.

To understand this phenomenon, Part 2 is based on two premises. First, we expand on the underlying differences that were identified in Part 1. Specifically, we propose that reactions to a colorblind response depends on the particular *conception* of race that the speaker is attempting to minimize. Second, we argue that the context in which a colorblind statement is expressed is important for understanding its meaning.

Perceptions of a statement minimizing race as an essentialized entity versus social reality

Some colorblind statements that were endorsed by more prejudiced people are explicit about denying the *social realities* of race (“racism may have been a problem in the past, it is not an important problem today”), while other statements that were endorsed by less prejudiced people are explicit about rejecting the notion of race as an *essentialized entity* (“to improve our society, we must learn to pay less attention to skin color and embrace the fact that as human beings, we are fundamentally no different from each other”). Thus, we propose that when heard by a perceiver, expression of these types of statements may be perceived as clearly prejudiced and unprejudiced, respectively, because what the speaker means by “race” is relatively clear.

But what if the colorblind statement is generic and ambiguous (e.g., “all human beings are individuals, and therefore race and ethnicity are not important”)? In such case, it is difficult to infer what the speaker means. The speaker may be referring to “race” in terms of its *social reality* or they may be referring to “race” as an *essentialized entity*. In fact, endorsement of this

type of statement was not predictive of racial attitudes, likely because such statement could be endorsed with either meaning in mind. Given that this generic form of a colorblind response is the most prevalent in the literature, as well as in larger society, failure to specify the aspect of race they are referring to may explain why expression of colorblind belief is surrounded by such confusion. So how is one to understand and predict the wide-ranging interpretations of such ambiguous expressions?

Disambiguating a colorblind response

One way people interpret meaning from an ambiguous statement is to infer meaning from other clues in the situation. In this research, we focus on two clues from which people may infer meaning: the topic of the larger conversation in which the colorblind statement was made, and the colorblind speaker's race.

Situation as context

It is not news that context can influence the meaning or interpretation of a given statement. For instance, in 1946, Solomon Asch demonstrated that the same word can be infused with different meaning depending on the words that surrounded it (Asch, 1946). This demonstrates that when people read a word, they do not consider its meaning in isolation, but use other clues in the context to form a gestalt impression of the word in question. Similarly, a study in 2005 showed that an ambiguous stimulus could be interpreted differently depending on the valence of the word that preceded it (Ferguson, Bargh, & Nayak, 2005). This is also demonstrated with the classic example used in psychology classes which describes an ambiguous paragraph of seemingly unrelated actions (e.g., "First you arrange things into different groups. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities that is the next step, otherwise you are pretty well set. It

is important not to overdo things”). Knowing the schematic on which to frame the actions (e.g., doing laundry) greatly influences the interpretation of the actions described (Bransford, & Johnson, 1972).

Following this long tradition within social psychology, we propose that perceptions of a person who expresses a colorblind belief greatly depends on whether the larger conversation in which a colorblind statement is made. Specifically, we propose the meaning depends on whether race is conceptualized as an *essentialized entity* or as a *social reality*, in the larger conversation. When made in response to a conversation describing race as an *essentialized entity*, the colorblind response (e.g., “I don’t think race is important”) might convey an *anti-essentialist* meaning and lead to perceptions of less prejudice, but when made in response to a conversation describing race as a *social reality*, the same statement might convey a meaning of *denying* the social realities of race, and lead to perceptions of greater prejudice.

Race of the speaker as context

Another way to infer meaning from an ambiguous statement is to consider the characteristics of the person making the statement. For instance, knowing that a person is a member of a minority group, has friends who are minorities, or is actively involved in advocating for minority rights, influences judgments of a person’s ambiguously immoral behavior (e.g., Thai, Hornsey, & Barlow; 2016; Wang, 2013; Krumm & Corning, 2008; Monin & Miller, 2001). This is because these pieces of information are thought to indicate the person’s underlying experiences and attitudes, which are then used to explain their motivations for behavior. For example, research shows that ambiguous behavior enacted by a White person is judged to be more prejudiced compared to the same behavior enacted by a Black person, because

a White person fits the prototype of a racially biased person while a Black person does not (Inman & Baron, 1996; Crocker, Voelkl, Testa, & Major, 1991).

Given that we often infer a person's attitudes from their personal background, we propose that a person's history—as inferred from their racial group membership—can serve as context for interpreting the meaning of a colorblind statement. That is, a racial minority's history is likely to include more significant social experiences with racial prejudice and is more likely to disagree with the essentialist view of race that has been used to justify it (Verkuyten & Brug, 2004), while a White person's history is likely to include less experience with the social consequences of race, and is more likely to endorse essentialist beliefs (Kraus & Keltner, 2013; Mahalingam, 2003). Therefore, we propose that a statement expressing a colorblind belief coming from a racial minority will be perceived to hold an *anti-essentialist* meaning, while the same belief coming from a White person will be perceived to hold a *denial of social reality* meaning. Understanding the differences between the inferred meanings of this statement may clarify some of the misunderstanding that occurs when a White person ineffectively tries to emulate the message of a Black person.

Overview

In Part 2 of this dissertation, we propose that a colorblind statement made in response to claims of *race as an essential entity* will be imbued with an *anti-essentialist* meaning and thus perceived as unprejudiced, while the same statement made in response to acknowledgement of *race as a social reality* will be perceived as *denying the social realities of race* and thus perceived as prejudiced (Studies 5 and 6). We hypothesize that this is because a person responding with a colorblind statement is perceived as disagreeing with the implicit contextual view of race (Study 7). We extend these distinctions to explain how a colorblind statement made

by a Black person can be interpreted to mean something different compared to the same statement made by a White person (Study 8).

Study 5: Do reactions to a colorblind statement depend on the topic of conversation?

Study 5 tests the hypothesis that the same colorblind statement made in response to different contexts will be perceived differently. Specifically, we predict that when made in response to an *essentialist* statement (i.e., an *essentialist* context), a colorblind speaker will be perceived as less prejudiced, but when made in response to a *social reality* statement (i.e., a *social reality* context), a colorblind speaker will be perceived as more prejudiced.

Participants

123 U.S.-born racial minority participants from the University of Washington subject pool participated in this study in exchange for course credit (55% female, 45% male; 80% Asian, 11% Latinx, 5% Black, 2% Native American, 2% Pacific Islander).

Materials

Interview contexts. To represent different “contexts”, we created different conversation topics, presented as a statement about race from an interviewer. We created three interview prompts to represent *acknowledgement of race as a social reality* (e.g., “It’s important to recognize that some racial groups enjoy advantages that others don’t, and some racial groups suffer disadvantages that others don’t”), two prompts to represent *race as an essentialized entity* (e.g., “It’s important to recognize that the color of someone’s skin can tell a lot about a person; some racial groups are just naturally more musical, or more athletic, or better at math”), and one prompt to represent a race-neutral control (e.g., “What are your thoughts about race in society?”) (see Supplemental Materials 9.1 for all prompts).

Interviewee responses. To test the perceptions of different colorblind responses, we created interviewee responses that represented each of the “colorblind” ideas identified in Part 1:

racism denial, *avoid discussing race*, and *common humanity*, as well as responses that were ambiguous with regard to which conception of race the speaker had in mind (e.g., generic colorblind statements that simply opposed racial categorization). Specifically, to create interviewee responses that were both open to interpretation and represented each of the colorblind ideas found in Part 1, we looked to the existing colorblind statements that were empirically most representative of each cluster, and extracted the core idea (e.g., “we should ignore race”), while leaving out the ideological justification for that idea (e.g., “because seeing people in terms of race is an injustice”).

For some of the colorblind ideas, we felt that there was more than one core idea involved. For example, one of the clusters involved focusing on our common humanity *and* that people of all races are fundamentally the same. We did not want to assume, however, that just because two messages often appeared together, or were endorsed by the same people, they would lead to the same effect when hearing it expressed by another person. Thus, to capture what we thought were both essential meanings behind a given idea, and to explore whether the two were in fact perceived differently, we created two separate responses to isolate each core message (e.g., one focusing on the idea that we are all human, another focusing on the idea that we are all similar).

In total, we created 7 different interviewee responses, each emphasizing a slightly different aspect of colorblind ideology. See Supplemental Materials 9.1.2 for an outline of the 3 main colorblind beliefs that were identified from previous research—as well as items that were found in colorblind scales but that did not much correlate with race attitudes—their most representative statements, and the interviewee responses that we created in effort to capture the core idea(s) behind those statements.

Photos. To indicate that the person making the colorblind response (i.e., the interviewee) was White, we presented each interview transcript with a photograph of a group of 12 White females (or 12 White males) who were within the traditional college age (age 18-25), selected from the Aging Mind Face Database (Minear & Park, 2004). All photos were of front-facing individuals, looking directly into the camera, assuming neutral face expressions, and cropped from the shoulders up. See Supplemental Materials 9.1.3 for the full set of photos.

Measures

Perceptions of Prejudice. To measure the extent to which each colorblind endorser seemed prejudiced, participants were asked “Based on this person’s response to this particular topic, how would you rate your impression of this person?” Participants rated their judgements of prejudice on a 1 (“This person is not prejudiced against racial minorities at all”) to 7 (“This person is extremely prejudiced against racial minorities”) scale.

Procedure

Participants completed this study on a computer in the lab in exchange for course credit. Participants were told that the study was interested in how people formed impressions of their peers, and that they would view excerpts of interview transcripts conducted with their fellow classmates. In each interview transcript, the interviewer made some statement about race, and the interviewee made some response. Each interview transcript was presented one at a time, accompanied by the group photo indicating that the interviewee was White. The group photo was gender-matched to the participant’s own self-identified gender.

All participants evaluated 6 interviews with ostensibly 6 different people. Each of the 6 interview prompts were different (i.e., 6 different contexts; within subject variable), but all 6 interviewees made the exact same response. The specific interviewee response that each

participant evaluated was randomly selected out of 7 possible colorblind responses (between subject variable). Each type of colorblind response was evaluated by 15 different participants (see Supplemental Materials 9.1.4 for a diagram illustrating the study design). Interviews (i.e., each prompt-response pair) were presented in randomized order. For each interview, participants indicated how prejudiced they thought the interviewee was, based on how they responded to the interview topic.

Results

For all analyses, we combined the results for interviews that included the same general type of interview prompt (i.e., we averaged the ratings of the three interviewees who responded to the *social reality* prompts, and the two interviewees who responded to the *race as essentialized entity* prompts), such that perceptions of interviewees in each of the 3 context types (i.e., *race as social reality*, *race as essentialized entity*, *control*) were represented by a single index score. However, we report when there are characteristics that are important in specific contexts.

Means and standard deviations for judgments of prejudice for each colorblind response are reported in Table 6.

Table 6.

Effect of context on judgments of prejudice for each colorblind response (Study 5)

Colorblind type	Response representing the colorblind type	Context type			ANOVA Omnibus F for differences across contexts
		Control	Social Reality	Essentialist	
<i>Racism denial</i>	“I don’t think race plays a role in people’s chances to get ahead anymore.”	4.20 (1.97) _a	4.80 (1.49) _a	3.27 (1.78) _b	10.02**

<i>Avoid discussing race</i>	“I think we should stop talking about and focusing so much on race.”	4.87 (1.13) _a	5.24 (.93) _a	3.37 (1.52) _b	17.76***
<i>Common humanity</i>	“I think that all people are basically the same, regardless of their racial background.”	2.59 (1.77) _a	3.45 (1.98) _b	2.06 (.92) _a	9.99**
<i>Common humanity</i>	“We are all human, so at our core, we are really all the same.”	2.93 (1.98) _a	4.04 (1.31) _b	2.47 (1.64) _a	21.01***
<i>Generic</i>	“I don’t think we should see people in terms of race.”	3.33 (1.54) _a	4.40 (1.32) _b	2.20 (.94) _c	29.09***
<i>Generic</i>	“I don’t think a person’s racial group membership is very important.”	3.87 (1.87) _a	5.00 (1.15) _b	2.87 (1.63) _c	13.01***
<i>Avoid discussing race</i>	“I think people of all races should be treated the same.”	1.71 (.85) _a	2.90 (1.14) _b	2.24 (1.24) _c	10.79***

Note. Entries in the 3rd to 5th columns are means (SDs) of participants’ ratings of an interviewee who responded with a colorblind response (corresponding to a row) to an interviewer’s question (corresponding to a column). Means that have different subscripts within each row are significantly different from each other ($p < .05$). * $p < .05$, ** $p < .01$, *** $p < .001$.

Does context affect perceptions of a colorblind response?

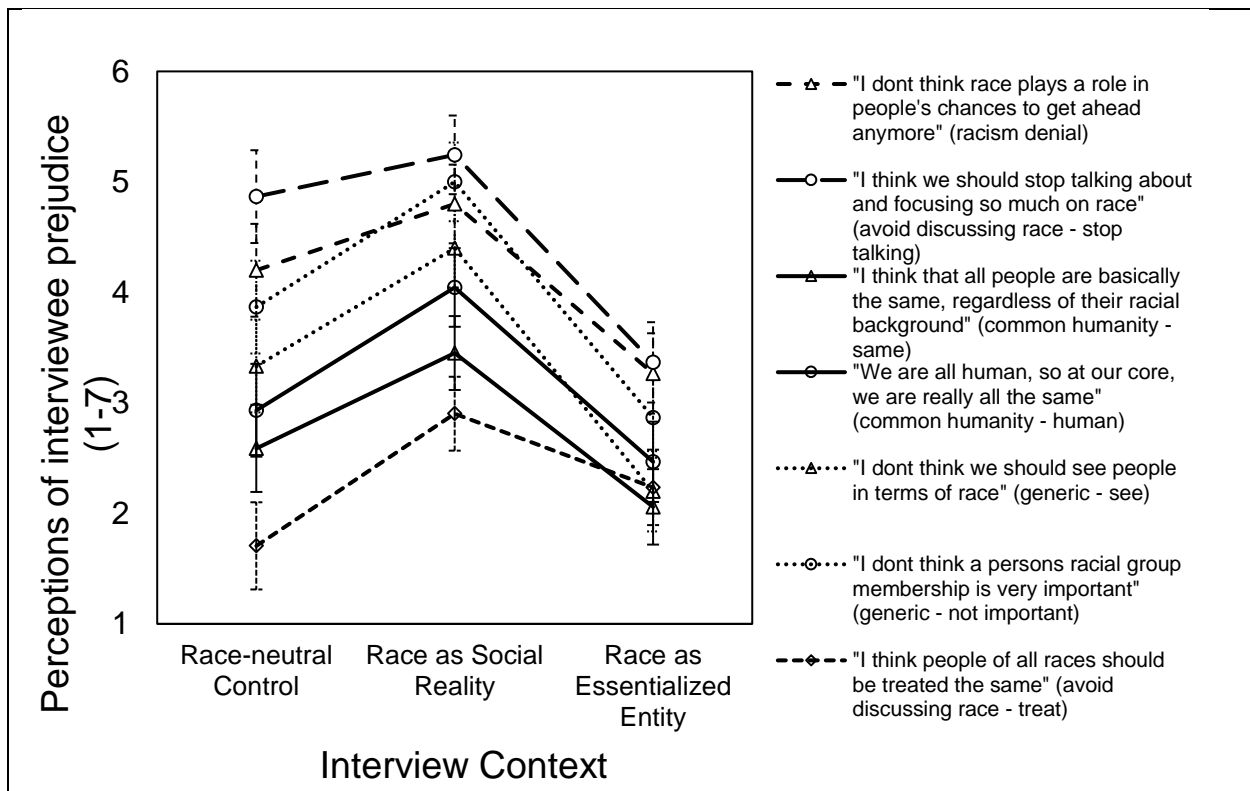
Repeated measures ANOVAs for each individual response revealed a strong effect of context for every colorblind response, all F ’s > 9.00 , p ’s $< .01$. The pattern of effects was similar across all colorblind responses (except for the *avoid discussing race* response that was specifically about how people are *treated*, which we discuss later): colorblind responses made in response to interviews referring to race as a *social reality* were perceived to be the most prejudiced, in response to interviews referring race to as an *essentialized entity* the least prejudiced, and in response to the race-neutral *control* interview prompt somewhere in the middle. In fact, pairwise comparisons revealed that judgments of prejudice for all colorblind responses made in the *social reality* contexts significantly differed from judgments of prejudice for responses made in the *essentialist* contexts (Table 6).

Does the effect of context differ depending on the colorblind response?

When considering both context and response in the same model (3 within x 7 between ANOVA), the main effects of context, $F(2, 101) = 94.54, p < .001$, and response, $F(6, 102) = 6.23, p > .001$, were qualified by a significant context x response interaction, $F(12, 204) = 2.15, p = .015$. That is, as Figure 3 illustrates, the effect of context on judgments of prejudice depended on the specific type of colorblind response: *racism denial* and *avoid discussing-stop talking* were perceived as most prejudiced and seemed relatively less influenced by context, *common humanity* responses were perceived as less prejudiced and also seemed relatively less influenced by context, and the *generic* statements were middle-of-the-road prejudiced, averaged across contexts, but seemed more influenced by context.

Figure 3.

Effect of context on judgments of prejudice for each colorblind response (Study 5)



Note. Colorblind response types are denoted by dashed (*avoid discussing race* and *racism denial*), solid (*common humanity*), and dotted (*generic*) lines. Error bars represent +/- 1 standard error.

The one response that deviated in pattern from the others was the *avoid discussing race-treat* response (“I think people of all races should be treated the same”), especially when examining the effect of each interview prompt separately (i.e., uncollapsed). Judgments of prejudice for this particular statement was not as influenced by any interview prompt, except when the interview prompt was *specific* to affirmative action. That is, this statement was perceived as unprejudiced in general, but when made in response to a prompt about the need for affirmative action, perceptions of this response was seen as prejudiced, and at similar levels to the other colorblind responses (see Supplemental Materials 9.2.1 for uncollapsed results).

To test whether these observed differences based on colorblind *type* were meaningful, we averaged the colorblind responses by their respective categories. Because *racism denial* and *avoid discussing race* represent two sides of the same coin, both conceptually and empirically, we combined the *racism denial* and *avoid discussing race* responses (except for the *avoid discussing race-treat* response, which appears different). For convenience, we refer to this combined response as *deny and avoid* hereafter, and the *avoid discussing race-treat* response as *treat* hereafter. We also averaged both *common humanity* responses together, and both *generic* responses together. We then reran a 3(context, within) x 4(colorblind type, between) ANOVA and examined the LSD post-hoc comparisons comparing the patterns of each colorblind type against another. Results show that the effect of context on judgments of prejudice is different for each colorblind type, p 's < .05, except between the *treat* and *common humanity* patterns, which showed similar effects of context, $p = .101$ (see Supplemental Materials 9.2.2).

Pairwise comparisons of context within each response type showed that, indeed, perceptions of the *generic* colorblind statements were most influenced by context, with all 3

contexts significantly differing from each other (denoted in Table 6 with subscripts). Perceptions of the other two major response types (i.e., *deny and avoid* and *common humanity*) were less affected by context. That is, for *deny and avoid* responses, judgments of prejudice in the *social reality* context did not differ from when they were in the *control* context, and for *common humanity* responses, judgments of prejudice in the *essentialist* contexts did not differ from when they were in the *control* context. This suggests that in the absence of clear context, *deny and avoid* colorblind statements may default to a denial of the *social reality of race* meaning, while *common humanity* statements default to a rejection of *the essentialist view of race*, as we would expect.

Discussion

Study 5 revealed that the perceptions of person making a colorblind response depended on whether the response was made in the context of a *race-as-essentialist* statement or a *race-as-social-reality* statement. In general, and across the majority of the colorblind responses we tested, a colorblind statement was perceived as less prejudiced when made in response to an argument for race as an *essentialized entity*, most prejudiced when in response to acknowledgement of the *social realities* of race, and somewhere in the middle when made in response to a *race-neutral* context. However, the exact effect of context depended on the particular colorblind response. For instance, context had a stronger influence on *generic* statements, relatively less influence on *deny and avoid* or *common humanity* statements, and a particularly unique effect for a colorblind response which is specific to how people are *treated*.

This study provided clear support for our hypothesis. However, the protocol participants underwent was unrealistic because each participant viewed the same response being made to the different contexts, potentially exaggerating the differences between contexts. In addition, participants read each of these interviews as transcript texts, which may have resulted in a

different type of judgment compared to audibly hearing a peer making these statements. Study 6 addresses each of these limitations.

Study 6: Do those findings replicate using stronger methods?

Study 6 presents a preregistered replication of Study 5 (osf.io/7r498), incorporating several improvements. First, we made the design more realistic by playing audio recordings of each interview. Second, participants heard all possible interview-response combinations in a randomized order that minimized the chance they heard the same response back-to-back. Third, we included reaction measures that extend beyond judgments of prejudice (e.g., feelings of anger, being disrespected, being devalued, and discomfort). Finally, to test the alternative hypothesis that *any* response will seem more or less prejudiced when following a highly prejudiced or unprejudiced statement (e.g., shifting standards, Biernat & Manis, 1994), we included an additional response to each interview, in addition to the same colorblind responses that participants of Study 5 saw. This additional response expressed an endorsement of *color-conscious* approaches (e.g., “I think it’s important to recognize differences between races”). Our prediction was that the *color-conscious* response will show patterns opposite to those of colorblind responses, to the extent that Study 5 findings were due to the perception that the colorblind statement *negates* the view of race that was in the interview context, and that the *color-conscious* response *affirms* the view of race. If, on the other hand, Study 5's results occurred because *any* response would seem more or less prejudiced when following a highly prejudiced or unprejudiced statement, respectively, then the participants' perception of the interviewee should be similar, whether or not the interviewee expressed a colorblind, or a *color-conscious*, ideology. To test these hypotheses more broadly, we conducted this study on 2 different samples: an undergraduate university sample, as well as a more diverse community college sample.

Method

Participants.

Sample 1. 56 University of Washington students ($M_{\text{age}} = 18.89$, $SD_{\text{age}} = 2.07$; 71% female, 29% male; 2% African American, 52% Asian American, 16% Latinx American, 2% Arab/Middle Eastern, 29% multiracial) participated in this study in exchange for course credit.

Sample 2. 32 students from Seattle Central Community College ($M_{\text{age}} = 25.75$, $SD_{\text{age}} = 9.45$; 23 female, 13 male, 2 other; 14 African American, 5 Asian American, 6 Latinx American, 1 Pacific Islander, 6 multiracial) participated in this study in exchange for course credit. This study was conducted as part of class for Sociology, Multicultural Communication, and Health Competency courses.

Materials

Interview contexts. To reduce the total number of interviews each participant would hear, we selected just 1 interview prompt to represent each context type. Specifically, for the *race-as-essentialist* context, we used the interview about the legitimacy of stereotypes (“It is important to recognize that the color of someone’s skin can tell a lot about a person; some racial groups are just naturally more musical, or more athletic, or better at math”). For the *social reality context*, we used the interview about needing to recognize inequality (“It is important to acknowledge that some racial groups enjoy advantages that others don’t, and that some racial groups suffer disadvantages that others don’t”). We also included the *policy-specific social reality* interview about affirmative action, as it proved slightly distinct in Study 5 (“Because of a system built on inequality, we need to provide additional opportunities for racial minority groups in order to level the playing field”). Lastly, we included the race-neutral *control* prompt (“What are your thoughts about race in society?”).

Interviewee responses. We selected a subset of the colorblind responses from Study 5, choosing one response to represent each of the colorblind ideas. Specifically, we included one *common humanity* statement (“At our core, we’re all human, so we’re really all the same”), one *racism denial* statement (“I don’t think race plays a role in people’s chances to get ahead anymore”), one *avoid discussing race* statement (“I think we should stop talking about and focusing so much on race”), and one *generic* statement (“I don’t think we should see people in terms of race”).

We also included the version of *avoid discussing race* that is focused on how people are treated (“I think people of all races should be treated the same”) because it was distinct in the *policy-specific social reality* context in Study 5, as well as a *color-conscious control* response for comparison (“I think it’s important to recognize differences between racial groups”).

Audio recordings. We collected female and male recordings of interviewer prompts and interviewee responses. One female and one male each recorded all 4 interview prompts, resulting in 4 recordings by 1 female, and 4 recordings by 1 male. The 6 responses were each recorded by a different female and a different male, resulting in 6 different female and 6 different male recordings. The voice actors added “um”, “well”, and other natural hesitations to increase the realism of the recordings. “Interviews” were then created by combining each interviewer recording with each response recording (female interviewers always interviewed male interviewees, and vice versa), for a total of 24 unique female interviewee interviews and 24 unique male interviewee interviews.

Photos. The same photos were used as in Study 5.

Measures

Participants rated the same item for the interviewee's prejudice as in Study 1. In addition, participants were prompted to vividly imagine interacting with each interviewee. They then indicated how they would feel interacting with this person, knowing how they responded, along several scales: 1(happy) to 7(angry), 1(valued) to 7(devalued), and 1(respected) to 7(disrespected). Finally, they rated how comfortable they would feel interacting with this person on a 1(extremely comfortable) to 7(extremely uncomfortable) scale.

Procedure

For Sample 1, this study was conducted on computers in the research lab on university campus. To reduce participant fatigue, the study was split into two parts, so that participants would listen to only 12 interviews at a time. Participants were told a similar story as in Study 1, and followed a similar procedure (with the exception of hearing audio clips through headphones instead of reading text). Participants returned 1 week later to listen to the 12 interviews they did not hear. The particular set of interviews participants listened to first was randomized, and the order of interviews within a set was randomized as well.

For Sample 2, this study followed the same procedure, but was conducted in several social science classes at the local community college. Class sizes ranged from 9 to 25 students. Students completed the study in class using laptops, smartphones, or tablets, at their desks, and listened to the interviews through headphones. Participation was optional and course instructors were not involved during the study.

Results

In both samples, we first examined subjects' responses for each DV separately, then computed the correlations between DVs. We found that the DVs were all highly correlated with each other ($r > .90$), so we combined the 5 measures into an average "negative reaction" score.

We again collapsed the responses for the two *social reality* contexts into one *social reality* score, but note the individual differences where relevant.

Sample 1 Results

Means and standard deviations for negative reactions toward each response are reported in Table 7.

Table 7. University of Washington sample ($n = 56$), effect of context on negative reactions for each colorblind response (Study 6)

Colorblind belief type	Colorblind response	Mean (SD)			ANOVA
		Control	Social Reality	Essentialist	Omnibus F (context)
<i>Racism denial</i>	“I don’t think race plays a role in people’s chances to get ahead anymore”	4.62 (1.18) _a	4.52 (1.07) _a	4.01 (1.18) _b	8.03***
<i>Avoid discussing race</i>	“I think we should stop talking about and focusing so much on race”	4.45 (1.59) _a	4.64 (1.23) _a	4.02 (1.42) _b	7.66***
<i>Common humanity</i>	“We are all human, so at our core, we are really all the same”	2.76 (1.28) _a	3.68 (1.29) _b	2.76 (1.27) _a	19.15***
<i>Generic</i>	“I don’t think we should see people in terms of race”	3.09 (1.28) _a	3.64 (1.28) _b	2.77 (1.04) _c	17.19***
<i>Avoid discussing race</i>	“I think people of all races should be treated the same”	2.26 (1.05) _a	3.12 (1.21) _b	2.71 (1.15) _c	13.95***
<i>Color-conscious</i>	“I think it’s important to recognize differences between racial groups”	3.08 (1.37) _a	2.87 (1.25) _a	3.51 (1.49) _b	3.67*

Note. Means that have different subscripts within each row are significantly different from each other ($p < .05$). * $p < .05$, ** $p < .01$, *** $p < .001$.

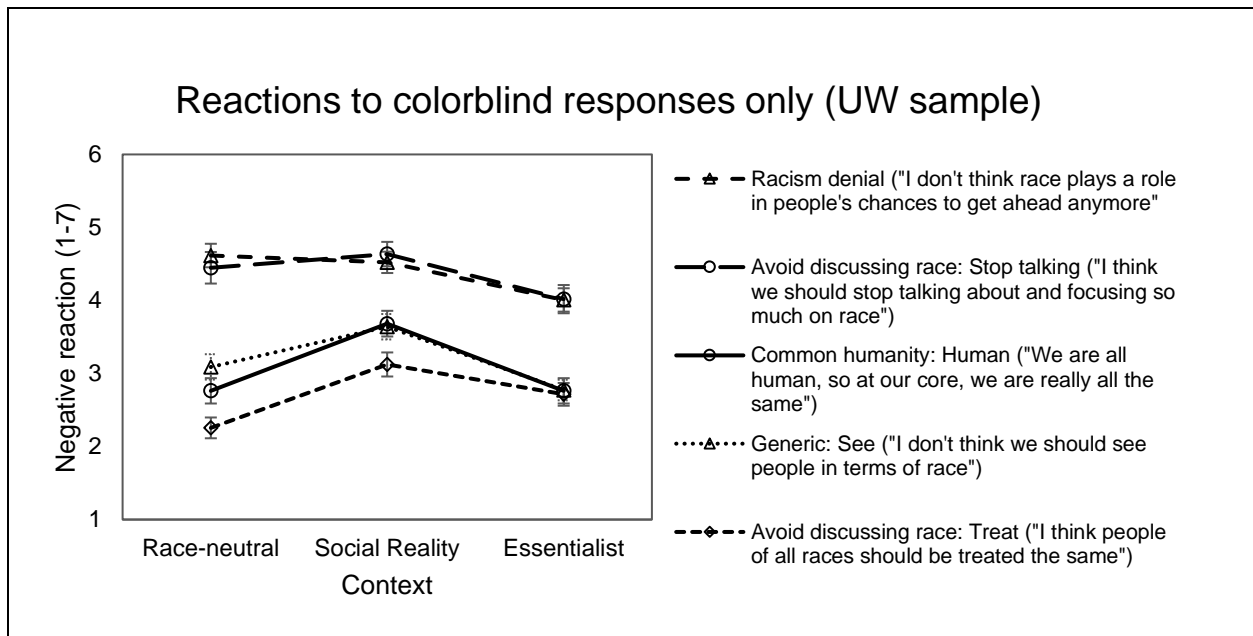
To understand how the effect of context depended on the response, we conducted a series of 3(context) x 2(response) repeated measures ANOVAs to make comparisons between responses. First, we compared all colorblind responses against the *color-conscious* control

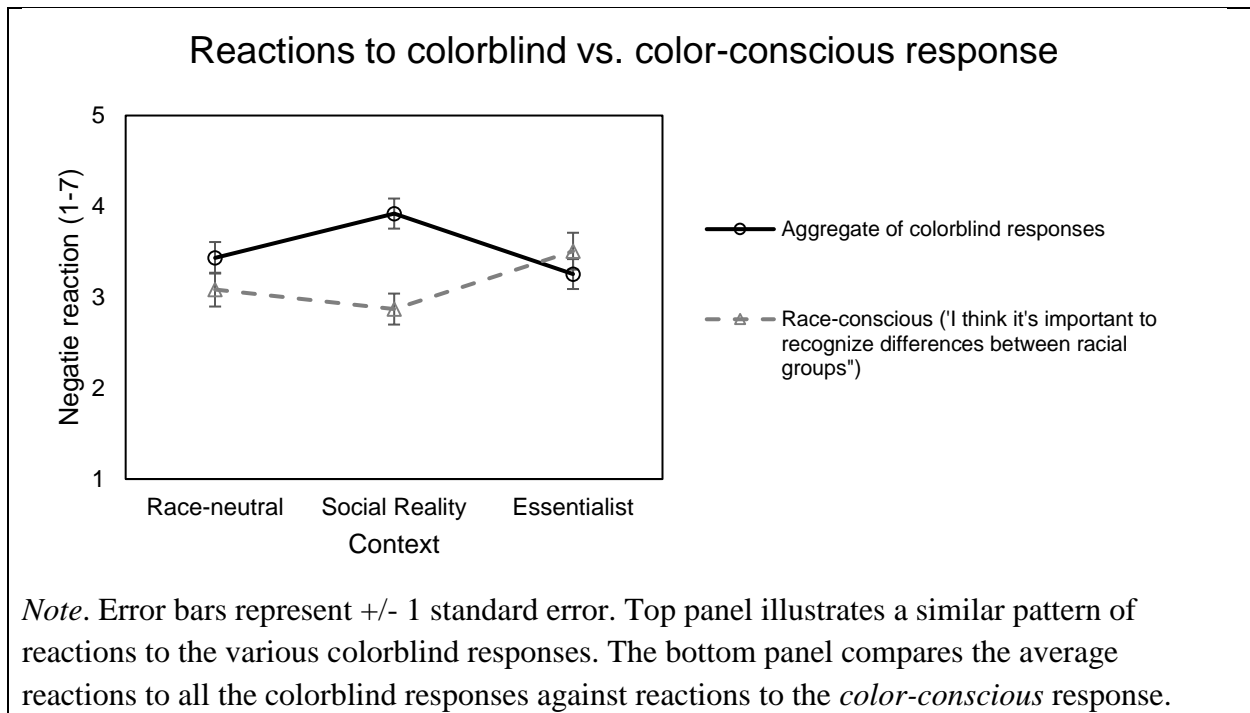
response. As predicted, all colorblind responses significantly interacted with the *color-conscious* response (see the last row of Supplemental Materials 10.1.1).

Next, we compared all colorblind responses against the *treat* response, which behaved differently from other responses in Study 5 (fourth row of Supplemental Materials 10.1.1). Again, as predicted, *treat* significantly interacted with all colorblind responses, except only marginally significantly with *common humanity*, $F(2, 52) = 2.62, p = .08$.

We also predicted that *racism denial* would be less affected by context compared to the other colorblind responses (first column of Supplemental Materials 10.1.1). This was true when compared to *common humanity*, $F(2, 54) = 14.01, p < .001$, and *generic*, $F(2, 54) = 7.99, p = .001$, but not when compared to *avoid discussing race-stop talking*, $F(2, 54) = 2.20, p = .12$, which exhibited very similar patterns to *racism denial*, as illustrated in Figure 4.

Figure 4.
University of Washington sample ($n = 56$), Study 2





Finally, we predicted that there would be a main effect of response type, regardless of context. To test this, we compared reactions to each response within the *race-neutral control* context only. A one-way repeated measures ANOVA revealed an overall significant effect of response, $F(5, 49) = 30.08, p < .001$. Simple contrasts showed that, in the absence of clear context, *racism denial* and *avoid discussing race-stop talking* elicited the most negative reactions, and not significantly different from each other, $F(1, 53) = 1.30, p = .26$. In the middle were negative reactions to *common humanity*, *generic*, and *color-conscious*, which did not significantly differ from each other, F 's $< 3.41, p$'s $> .07$, but did differ from *racism denial* and *avoid discussing race-stop talking*, F 's $= 36.83, p < .001$. Lastly, *treat* elicited the least negative reaction, and significantly so compared to *common humanity*, *generic*, and *color-conscious*, F 's $< 11.09, p$'s $< .01$.

Sample 2 Results

Parallel analyses on Sample 2 yielded similar results. When considering both within-subjects variables in the same model, we again observe a significant main effect of context, $F(2, 30) = 7.13, p = .003$, significant main effect of response, $F(5, 27) = 26.39, p < .001$, and a significant interaction between the two, $F(10, 22) = 2.39, p = .04$.

As Figure 5 illustrates, colorblind responses were again overall reacted to most negatively in *social reality* contexts, least negatively in *essentialist* contexts, and somewhere in the middle in *race-neutral* contexts, with the majority of responses showing a significant effect of context, F 's $> 7.40, p$'s $< .01$ (Table 8). However, whereas there was a small effect of context on *racism denial* and *avoid discussing race-stop talking* in Sample 1, context did not influence reactions to these responses in Sample 2, $F(2, 31) = 2.18, p = .13$, and $F(2, 31) = .84, p = .44$, respectively.

Table 8.

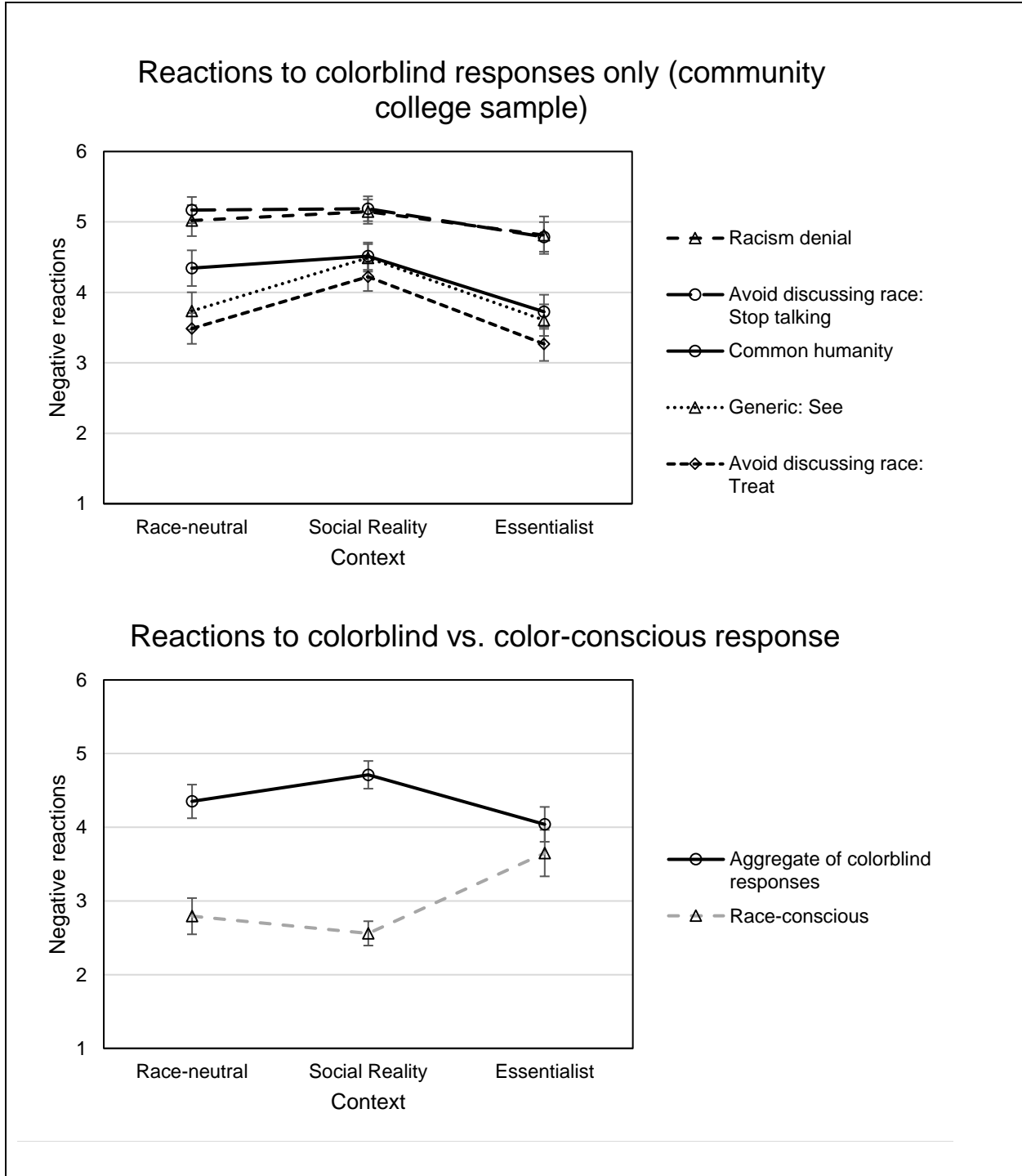
Study 6, community college sample (n = 32), effect of context on negative reactions for each colorblind response

Colorblind belief type	Colorblind response	Mean (SD)			ANOVA
		Control	Social Reality	Essentialist	Omnibus F (context)
<i>Racism denial</i>	"I don't think race plays a role in people's chances to get ahead anymore"	5.02 (1.24)	5.15 (.97)	4.81 (1.51)	2.18
<i>Avoid discussing</i>	"I think we should stop talking about and focusing so much on race"	5.17 (1.05)	5.19 (.99)	4.79 (1.18)	.84
<i>Common humanity</i>	"We are all human, so at our core, we are really all the same"	4.34 (1.43) _a	4.51 (1.10) _a	3.73 (1.37) _b	7.47**
<i>Generic</i>	"I don't think we should see people in terms of race"	3.74 (1.49) _a	4.49 (1.10) _b	3.61 (1.27) _a	10.48***
<i>Avoid discussing</i>	"I think people of all races should be treated the same"	3.49 (1.23) _a	4.22 (1.14) _b	3.27 (1.37) _a	9.50***
<i>Color-conscious</i>	"I think it's important to recognize differences between racial groups"	2.79 (1.39) _a	2.56 (.93) _a	3.65 (1.79) _b	5.18**

Note. Means that have different subscripts within each row are significantly different from each other ($p < .05$). * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 5.

Study 6, community college sample (n = 32)



Reactions to the *color-conscious* response again showed an effect of context, $F(2, 30) = 5.18, p = .01$, and in a direction opposite to those toward colorblind responses. In fact, comparisons between responses showed again that the effect of context was significantly different for all colorblind responses compared to the color-conscious response, $F^2s > 4.40, p^2s < .05$ (see the last row of Supplemental Materials 10.1.2).

The effect of context on *treat* was again significantly different from that of *racism denial*, $F(2, 31) = 6.90, p = .003$, and *avoid discussing race*, $F(2, 31) = 4.89, p = .01$, and marginally significantly different from *common humanity*, $F(2, 31) = 2.67, p = .085$. However, in this sample, the effect of context on *treat* was not significantly different from *generic*, $F(2, 31) = .09, p = .91$ (see the fourth row of Supplemental Materials 10.1.2).

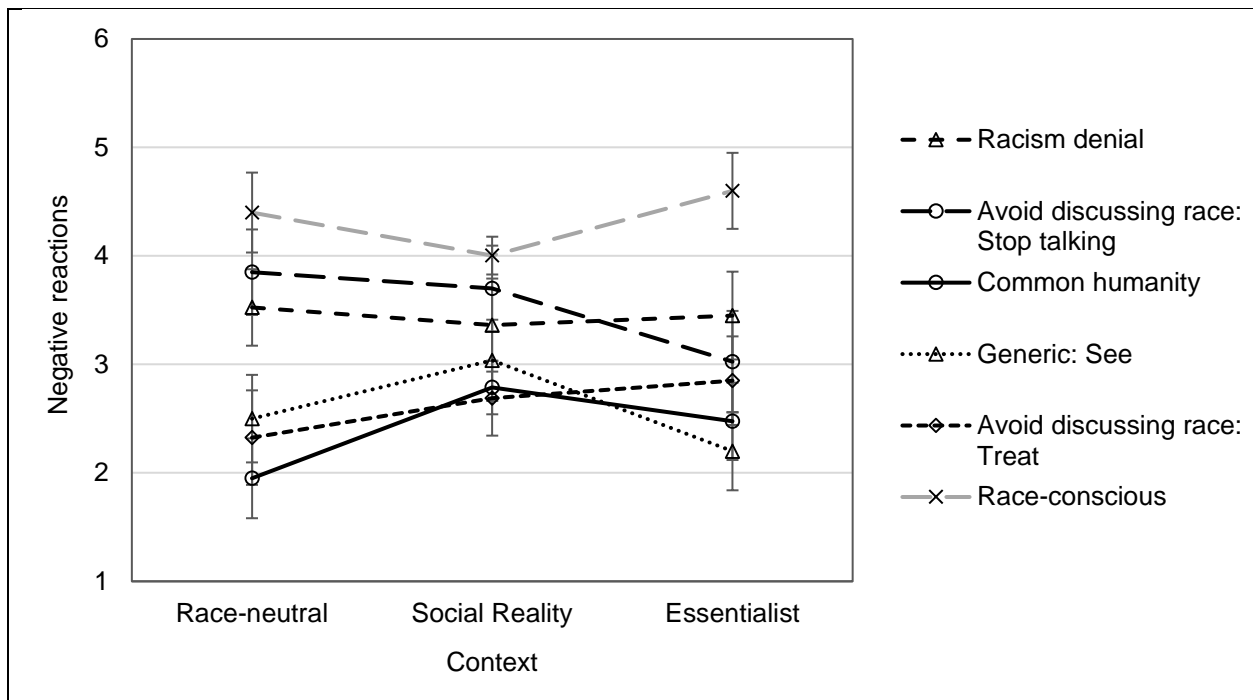
Finally, in the absence of context (i.e., the race-neutral context), response type alone varied in terms of elicited reactions, $F(5, 27) = 14.91, p < .001$. Specifically, *racism denial* and *avoid discussing race-stop talking* again garnered the most negative reaction, and at similar levels to each other, $F(1, 31) = .54, p = .47$. However, reactions to the other responses slightly differed from the reactions in Sample 1. Specifically, whereas in Sample 1, *treat* received the most positive reaction, and the *color-conscious* response was in the middle, for Sample 2, the *color-conscious* response received the most positive reaction, and the *treat* and *common humanity* responses were perceived more negatively.

Exploratory analysis

We also had a small sample of international students (i.e., lived in the U.S. less than 10 years; 7 from Asia, 1 from Mexico, 1 from Europe). As a preliminary exploratory test, we compared the responses between international ($n = 9$) vs. non-international students ($n = 32$). There was no 2-way interaction between the effect of context and international status, $F(2, 38) = .66, p = .52$, nor was there a 3-way interaction between context, response type, and international

status, $F(10, 30) = 1.29, p = .28$. However, there was a significant response type x international status interaction, $F(5, 35) = 9.99, p < .001$. This suggests that context also influences reactions to different responses for international students—similar as for non-international students—but the responses themselves are perceived quite differently (see Figure 6).

Figure 6.
Exploratory data for international students ($n = 9$)



For instance, although context influenced reactions to the colorblind and *color-conscious* responses in the directions that were expected, the *color-conscious* response actually led to the overall most negative reaction overall, and *common humanity* and *treat* responses led to the least negative reactions overall. Though exploratory, this departure from our findings with U.S.-born racial minorities is noteworthy. These preliminary results suggest that the meaning and perceived appropriateness of recognizing race or emphasizing common humanity is culturally significant.

Discussion

Study 6 replicated the main findings of Study 5 across two different samples, using a more ecologically valid design. We again observed a strong effect of context for most colorblind responses: colorblind statements made in response to a conversation *acknowledging race as a social reality* is perceived more prejudiced and elicits greater anger, discomfort, and feelings of disrespect, while the same statements made in response to claiming *race as an essentialized entity* is perceived as less prejudiced and elicits less anger, discomfort, and feelings of disrespect.

Interestingly, even though the strength of the context effect depended on response type, there was still an effect of context for *racism denial* and *common humanity* statements. This is interesting because these statements are more explicit in the specific aspect of race they are addressing, and one may think that their meaning would be less likely to be derived from the context. The fact that context influenced reactions to these statements suggests that a colorblind response may be interpreted as disagreeing with the implicit contextual view of race, regardless of the *actual* content of the colorblind statement (i.e., whether they are explicitly affirming an anti-essentialist view, or explicitly denying race as a social reality). This is particularly evident when considering the reactions to the *color-conscious* response, which showed an opposite pattern from the colorblind responses, suggesting that a *color-conscious* response *affirms* the implicit contextual view of race.

Although context exerted similar effects across the two samples, there were slight differences between specific responses. In Sample 1, the *color-conscious* response was perceived as somewhat prejudiced overall (i.e., irrespective of context), and at similar levels to the *generic* statements and *common humanity* statements. In Sample 2 however, the *color-conscious* response was perceived the least prejudiced overall, and the *common humanity* response was

perceived relatively more prejudiced. These differences may be due to the fact that the community college classes in which Sample 2 data was collected had a diversity focus built into the course (e.g., multicultural communication, sociology), whereas Sample 1 may have represented a more naïve population of students unexposed to issues of diversity in academic analysis. The two samples also consisted of a different demographic makeup, with Sample 2 representing a more diverse, older people, and Sample 1 representing a less diverse, younger people.

Finally, though exploratory, the data on international students was very different. Specifically, the *color-conscious* response was perceived as most prejudiced, and the *common humanity* response was perceived to be the least prejudiced. These preliminary data suggest that whether society should highlight or downplay race is culturally dependent (e.g., Apfelbaum et al., 2016), and that the main findings of Study 1 and Study 2 may require relatively extensive exposure to American society.

Study 7: Is a colorblind response perceived to disagree with the implicit contextual view of race?

Studies 5 and 6 support our prediction that when made in the context of a *race-as-essentialist* statement, a colorblind response is perceived as less prejudiced, but when made in the context of a *race-as-social reality* statement, a colorblind response is perceived as more prejudiced. We based our predictions on the assumption that a colorblind response inherently disagrees with the previous statement about race, while a *color-conscious* response inherently agrees with the previous statement about race. To empirically test this proposed mechanism, Study 7 tests whether a colorblind statement is in fact heard as disagreeing with the previous statement about race, and a color-conscious statement in fact heard as agreeing with the previous

statement about race. The perceived prejudice of the speaker would then depend on whether they are agreeing or disagreeing with the previously prejudiced or unprejudiced statement.

When debriefing participants in Study 6, many participants also mentioned that some interviewees seemed not to answer the original question, or answered in a way that wasn't directly related to the topic in question (e.g., interviewer: "inequality exists", interviewee: "at our core, we're all human, so we're really all the same"). It is possible then, that judgments of prejudice might also be explained by perceptions that the person is trying to *deflect* or *avoid* answering the question, rather than simply agreeing or disagreeing with the previous statement. To account for this possibility, we also measured the extent to which each interviewee is perceived to deflect or otherwise avoid answering the question.

Method

Participants

22 U.S. born minority students from the University of Washington ($M_{\text{age}} = 18.68$, $SD_{\text{age}} = .65$; 13 female, 9 male; 14 Asian, 3 Latinx, 5 Multiracial) participated in this study in exchange for course credit.

Materials

Interview contexts. We chose one interview prompt to represent each context type. Specifically, *acknowledgement of race as a social reality* was represented by "It's important to recognize that some racial groups enjoy advantages that others don't, and some racial groups suffer disadvantages that others don't", and *race as an essentialized entity* was represented by "It's important to recognize that the color of someone's skin can tell a lot about a person; some racial groups are just naturally more musical, or more athletic, or better at math".

Interviewee responses. We chose one interview response to represent each of the 3 versions of colorblind ideas, plus the generic, ambiguous type of colorblind statement.

Specifically, to represent *racism denial*, interviewees responded with “I don’t think race plays a role in people’s chances to get ahead anymore”. To represent *avoid discussing race*, interviewees responded with “I think we should stop talking about and focusing so much on race”. To represent *common humanity*, interviewees responded with “At our core, we’re all human, so we’re really all the same”. Finally, to represent the *generic, ambiguous* form of a colorblind statement, interviewees responded with “I don’t think we should see people in terms of race”.

In addition to colorblind responses, participants saw a *color-conscious* response (“I think it’s important to recognize the differences between racial groups”) as well as a neutral control response that was still relevant to race, but said nothing about *minimizing* or *recognizing* race (“According to the U.S. Census Bureau, White Americans are the racial majority, and African Americans are the largest racial minority”).

Measures

Participants rated the extent to which they thought each interviewee was disagreeing with what the interviewer was saying (1 = completely agreeing, 7 = completely disagreeing). To capture the possibility that they thought the interviewees were trying to avoid answering the topic, participants also rated the extent to which they thought each interviewee was deflecting or otherwise trying not to respond to what the interviewer said (1 = not at all, 7 = extremely).

Procedure

Participants underwent the same protocol as in Study 5. However, rather than viewing the same response to different interview topics, participants were randomly assigned to view all 6 responses to either the same *race-as-essentialist-entity* topic ($n = 12$), or all 6 responses to the same *race-as-social-reality* topic ($n = 10$). Interviews were presented in random order. For each

interview, participants rated the extent to which they felt the interviewee was disagreeing with the interviewer and the extent to which they felt the interviewee was deflecting from answering.

Results

Descriptive statistics for perceptions of disagreement with the interview prompt are reported in Table 9.

Table 9.
Perceptions of disagreement

Response type	Essentialist context <i>M (SD)</i>	Social reality context <i>M (SD)</i>	Independent samples <i>t</i> -test (<i>t</i>)
Racism denial	5.75 (1.60)	6.50 (.53)	1.41
Avoid discussing	5.42 (1.31)	6.00 (1.05)	1.13
Common humanity	5.83 (1.34)	5.50 (1.18)	0.61
Generic	6.33 (.65)	4.60 (1.35)	3.94***
Color-conscious	3.08 (1.24)	2.50 (1.65)	0.95
Control	3.92 (.51)	3.90 (.99)	0.05
ANOVA: <i>F</i> (df)	31.51 (5, 7)***	15.46 (5, 5)**	
Control vs. CB: <i>F</i> (df)	64.30 (1, 11)***	55.13 (1, 9)***	
Color-conscious vs. CB: <i>F</i> (df)	60.96 (1, 11)***	33.20 (1, 9)***	

* $p < .05$, ** $p < .01$, *** $p < .001$.

We first tested whether there was a difference in perceptions of disagreement across the different response types overall. When averaging all colorblind responses together and conducting a one-way repeated measures ANOVA to test differences across response type (i.e., colorblind vs. color-conscious vs. control), we found an overall effect of response type on perceptions of disagreement, $F(2, 20) = 77.55, p < .001$.

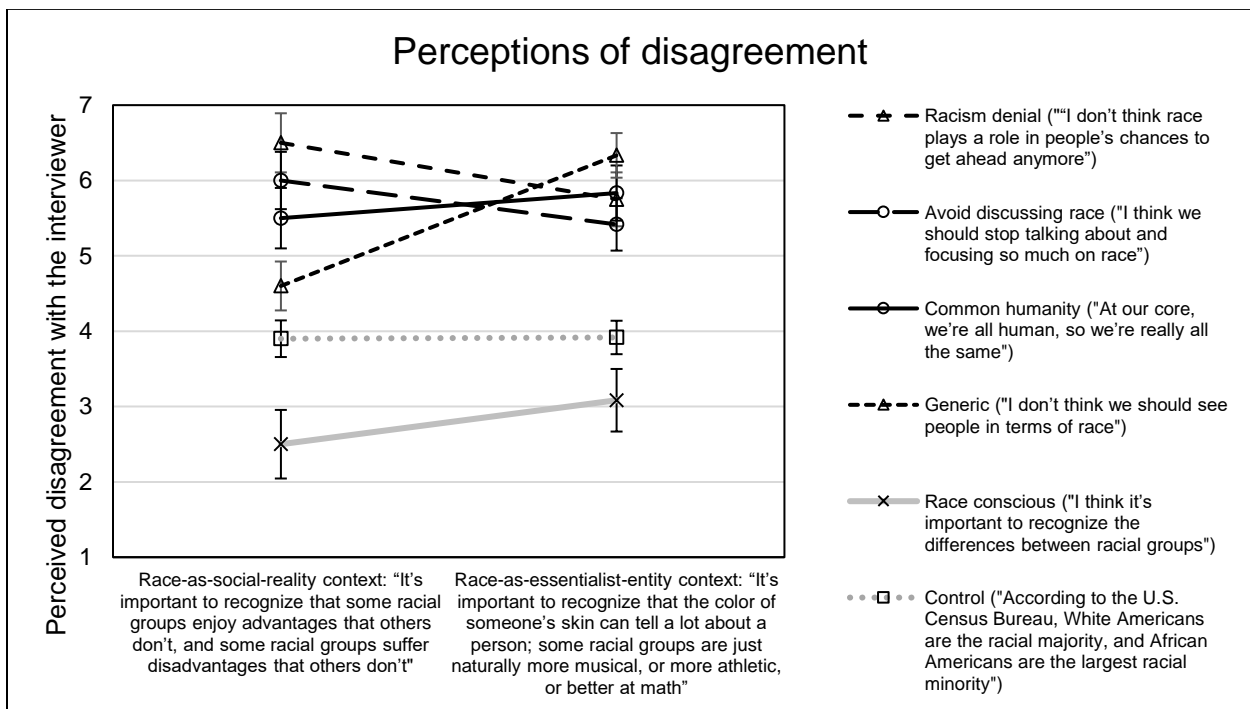
Simple contrasts revealed that, as predicted, the average of all colorblind responses ($M = 5.75, SD = .63$) were indeed perceived to disagree with the interviewer more so than the neutral control response ($M = 3.91, SD = .75$), $F(1, 21) = 123.35, p < .001$. In addition, the color-

conscious response ($M = 2.82$, $SD = 1.44$) was perceived to agree with the interviewer more so than the neutral control response, $F(1, 21) = 26.18$, $p = .002$. Finally, the color-conscious response was perceived to disagree with the interviewer more so than the combined colorblind responses, $F(1, 21) = 89.95$, $p < .001$. Overall, these patterns for perceived disagreement and agreement align with the patterns of perceived prejudice in Studies 5 and 6.

Interestingly, a 6 (within, response) x 2 (between, context) mixed factorial ANOVA revealed that perceptions of disagreement also depended on the context, $F(5, 16) = 5.71$, $p = .003$. Specifically, simple contrasts showed that the *generic* response (“I don’t think we should see people in terms of race”) is perceived to disagree more in the *race-as-essentialist* context compared to the *race-as-social-reality* context (see Figure 7).

Figure 7.

Perceptions of disagreement (Study 7)



Note. This graph shows that the 4 colorblind responses are perceived to disagree with the interviewer more so than both the *color-conscious* and neutral control responses. Interestingly,

the *generic* colorblind response “I don’t think we should see people in terms of race” is perceived to disagree with the *race-as-essentialist* statement much more than a *race-as-social-reality* statement.

We conducted similar analyses on the extent to which colorblind responses are perceived to deflect or otherwise not respond to the previous topic (see Supplemental Materials 11.1.1). Unlike perceptions of disagreement, one is perceived to *deflect* when the colorblind response is made in a *race-as-social-reality* context more so than in a *race-as-an-essentialist-entity* context. The one exception is with the *racism denial* colorblind response, which was perceived to be less of a deflection in both contexts. Interestingly, when in response to the *race-as-social-reality* interview, *common humanity* and *avoid discussing race* response were perceived as even more deflecting than the neutral *control* response, $F(1, 9) = 4.21, p = 0.70$, and $F(1, 9) = 7.58, p = .02$, respectively.

Discussion

As predicted, all 4 colorblind responses were perceived to disagree with the interviewer more so than the *control* and *color-conscious* response, and the *color-conscious* response was perceived to agree with the interviewers more so than the *control* response. These perceptions of disagreement are similar across contexts, except for the statement “I don’t think we should see people in terms of race”, which was perceived to disagree with the *race-as-essentialized-entity* context more so than the *race-as-social reality* context.

Perceptions of whether a colorblind response was trying to deflect the question showed different patterns: a colorblind statement made in response to a *race-as-social reality* context was seen as more deflecting compared to the *race-as-essentialist* context, with *racism denial* being perceived as the least deflecting. Interestingly, some colorblind responses were perceived to deflect even more than the *control* response, which was written explicitly as a statement of

random, irrelevant fact about race. Because the *racism denial* response is perceived to deflect the question at similar levels as the *color-conscious* response, but was reacted to substantially more negatively when heard by a racial minority in Studies 5 and 6, we do not believe perceptions of deflection to be the driver of our previous effects.

Together, these findings support the assumptions that were made in Studies 5 and 6: that participants react negatively to a colorblind statement made in a context acknowledging *race as a social reality* because the colorblind response is perceived to *disagree* with that view of race, thus imbuing that colorblind response with a *denial of race as a social reality* meaning. In contrast, when made in the context claiming *race-as-essential entity*, the same colorblind response is perceived to disagree with *that* view, thus imbuing that same colorblind response with an *anti-essentialist* meaning. The *color-conscious* response is perceived to work oppositely: it affirms that race *is* a social reality when made in a context that states that, or that race *is* an essential entity when made in context that claims that.

Study 8: Does the perceived meaning of a colorblind statement depend on the speaker's race?

Studies 5, 6, and 7 demonstrate that the context in which a colorblind statement is made can imbue the statement with an *anti-essentialist* meaning or a *denial of race as a social reality* meaning, leading to different judgments of the speaker's prejudice. Study 8 tests the influence of another context on the perceived meaning of a colorblind statement: the colorblind speaker's own race. Specifically, because Black people are perceived to be less prejudiced than White people (Baron & Inman, 1996), and likely have different personal experiences regarding ideas about the "essence" of race (Verkuyten & Brug, 2004), we predict that a colorblind remark coming from a Black person will be perceived to assume an *anti-essentialist* meaning, while the

same colorblind remark coming from a White person will be perceived to assume a *denial of the social realities of race* meaning.

Method

Participants

43 U.S.-born participants from the University Washington subject pool ($M_{\text{age}} = 18.49$, $SD_{\text{age}} = 1.76$; 25 female, 18 male; 28 Asian/Asian American, 7 multiracial, 4 Latinx/Latinx American, 3 Black/African American, 1 White) participated in this study in exchange for course credit.

Materials

Colorblind statements. As a preliminary test, we chose 4 colorblind responses from the original set of 7 (in Study 5) that we felt had the most potential to take on both a *essentialist* and *social reality* meaning: “I think we should stop talking about and focusing so much on race” (*stop talking*), “I think people of all races should be treated the same” (*treat*), “I don’t think we should see people in terms of race” (*see*), and “I think that all people are basically the same, regardless of their racial background” (*same*).”

Photos. Photos of 12 black and 12 white faces that were matched in age (ages 20-35), gender (all males), attractiveness, and stereotypicality, were chosen for this study (Goff, Eberhardt, Williams, & Jackson, 2008).

Measures

Anti-essentialist. To assess the degree to which a colorblind statement was perceived to take on an *anti-essentialist* message, we created two statements representing *anti-essentialism* based on the wording used in the interviews in Studies 5, 6, & 7. For each colorblind statement, participants indicated the extent to which they believed the speaker meant “The color of someone's skin can't tell you anything about a person's interests, ability, intelligence, or

personality,” and “There is really no inherent biological basis for racial categories—differences between races are not natural or inevitable” on a 1 (does not mean this at all) to 7 (means this exactly) scale.

Denial of social reality of race. Two statements representing *denial of race as a social reality* were created. For each colorblind statement, participants indicated the extent to which they believed the speaker meant “There are no longer differences in opportunities between racial groups—no racial group has an advantage or disadvantage in life anymore,” and “It is really not necessary to provide additional opportunities for racial minority groups because the system is already fair and equal” on a 1 (does not mean this at all) to 7 (means this exactly) scale.

Procedure

Participants were presented with 4 colorblind statements one at a time, which were ostensibly being made by 2 Black individuals and 2 White individuals. The speaker’s race was indicated by a photo accompanying each statement. The specific photos that participants saw were randomly sampled from a set of 12 Black and 12 White photos. The specific photo/statement pairing was randomized for each participant, such that across all participants, each statement was presented with a Black photo at least 10 times and a White photo at least 10 times.

For each person and colorblind statement shown, participants were given the instructions: “There are many ways to interpret this statement. We list 4 possibilities below. In making this statement, [name] could mean all, some, or none of these things. What do you think [name] means? Please indicate how you would interpret [name]’s statement along the 4 possibilities below.” Participants then indicated the extent to which they perceived the colorblind speaker to mean the *anti-essentialism* message, and the *denial of race as a social reality* message.

Results

Descriptive statistics are presented in Table 10.

Table 10.

Descriptive statistics for the interpretations of each colorblind statement when paired with black vs. white photo.

	Interpretation (DV)	Colorblind statement	Black photo	White photo	t-test
			Mean (SD)	Mean (SD)	
Denial of social reality	"There are no longer differences in opportunities between racial groups--no racial group has an advantage or disadvantage in life anymore."	Stop talking	2.95 (2.04)	4.14 (2.04)	t(41) = 1.91, p = .06
		Treat	2.18 (1.37)	3.43 (1.75)	t(41) = 2.61, p = .01
		See	1.65 (1.19)	2.60 (1.96)	t(41) = 1.95, p = .06
		Same	3.25 (2.05)	3.83 (1.99)	t(41) = .93, p = .36
	"It is really not necessary to provide additional opportunities for racial minority groups because the system is already fair and equal."	Stop talking	2.86 (1.90)	4.77 (1.97)	t(41) = 3.24, p = .002
		Treat	2.32 (1.76)	2.95 (1.99)	t(41) = 1.11, p = .27
		See	1.30 (.63)	3.20 (2.14)	t(41) = 4.05, p < .001
		Same	2.30 (1.42)	3.61 (1.95)	t(41) = 2.49, p = .02
Anti-essentialist	"The color of someone's skin can't tell you anything about a person's interests, ability, intelligence, or personality."	Stop talking	5.29 (1.82)	3.36 (1.76)	t(41) = 3.52, p = .001
		Treat	5.64 (1.89)	5.14 (1.59)	t(41) = .92, p = .36
		See	5.48 (1.95)	4.70 (1.75)	t(41) = 1.37, p = .18
		Same	5.40 (2.28)	4.96 (1.99)	t(41) = .68, p = .50
	"There is really no inherent biological basis for racial categories -- differences between races are not natural or inevitable."	Stop talking	3.81 (1.78)	2.82 (1.75)	t(41) = 1.85, p = .07
		Treat	4.95 (2.01)	3.48 (1.69)	t(41) = 2.60, p = .01
		See	3.83 (1.97)	3.45 (2.04)	t(41) = .62, p = .54
		Same	4.45 (1.96)	4.65 (2.08)	t(41) = .33, p = .75

Note. The number of participants who viewed each combination slightly varied. 21 participants viewed "stop talking" paired with a black photo, and 22 with a white photo, 22 viewed "treat" with a black photo, and 21 with a white photo, 23 viewed "see" with a black photo, and 20 with a white photo, and 20 viewed "same" with a black photo, and 23 with a white photo.

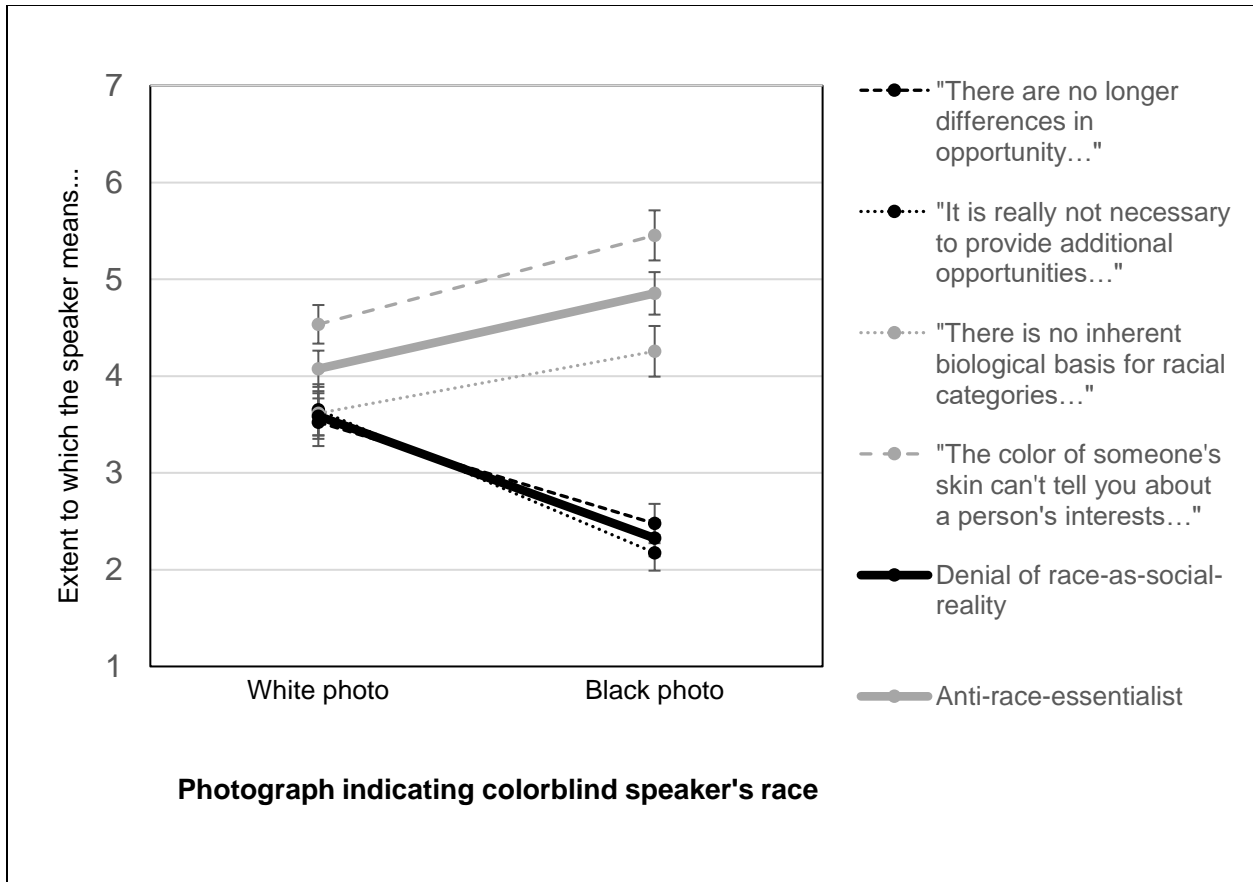
To test whether interpretations of a colorblind response depended on the speaker's race, we first averaged all colorblind responses together, then averaged the *denial of race as a social reality* interpretations and *anti-essentialism* interpretations by the speaker's race, and conducted a 2(speaker's race, within) x 2 (interpretation, within) repeated measures ANOVA.

Overall, participants interpreted both Black and White speakers to mean an *anti-essentialist* message more so than a message *denying the social realities* of race, $F(1, 42) = 44.35, p < .001$. However, the degree to which the speaker was perceived to mean either message depended on the speaker's race, interaction $F(1, 42) = 26.70, p < .001$. Specifically, a colorblind belief expressed by a White individual was perceived to mean a *denial of social realities of race* ($M = 3.59, SD = 1.55$) more so than a Black individual expressing the same statement ($M = 2.33, SD = 1.23$), $t(42) = 4.87, p < .001$, and a Black individual ($M = 4.85, SD = 1.44$) was perceived to mean an *anti-essentialist* message more so than a White individual ($M = 4.08, SD = 1.23$), $t(42) = 3.30, p = .002$.

Notably, although Black speakers were interpreted to mean the *anti-essentialist* meaning much more than a *denial of race as a social reality* compared to White speakers, White speakers were still perceived to mean the *anti-essentialist* message more than the *denial of race as a social reality* message overall. The exception is with the *avoid discussing race-stop talking* statement. This colorblind statement in particular was perceived to take on more of an *anti-essentialist* meaning when coming from a Black speaker, but more of a *denial of race as a social reality* meaning for White speakers (Figure 8).

Figure 8.

Interpretations of a colorblind statement when made by a White vs. Black individual



Note. This graph shows the interpretations of all 4 colorblind statements combined. Dotted lines are the specific meanings that participants rated. The thick solid grey line represents the average of the 2 *denial of race-as-social reality* meanings and the thick solid black line represents the average of the 2 *anti-race-essentialist* meanings. Error bars represent +/- 1 standard error.

Discussion

Study 8 extended the theoretical framework proposed in Studies 5, 6, and 7 to test the effect of another context on the perceived meaning of a colorblind statement. Specifically, Study 8 shows that a colorblind statement made by a Black individual is perceived to take on an *anti-essentialist* meaning and not a *denial of race as a social reality* meaning, while the same statement made by a White individual is perceived to take on both an *anti-essentialist* meaning and a *denial of race as a social reality* meaning. These findings may begin to explain why a colorblind belief expressed by a Black individual may feel different, and be interpreted with

different meaning, compared to the same belief expressed by a White individual, as was the scenario with which this paper initially began.

However, a limitation with this design is that we did not include *non-colorblind* statements, and so cannot conclude that this effect is *specific* to colorblind statements. That is, we cannot rule out the possibility that a White person saying *anything* would be seen as denying the social realities of race, while a Black person saying *anything* would be seen as making anti-essentialist statement. Future work should test whether this effect is observed more strongly for colorblind vs. non-colorblind statements.

PART 2 DISCUSSION

Across four studies, we found that the perceptions of a person expressing a colorblind belief depends on the context in which the statement was made. In Studies 5 and 6, we show that when made in the context of a conversation acknowledging the *social* realities of race, a colorblind response is perceived as prejudiced, and elicits greater feelings of anger and discomfort for racial minority participants. In contrast, when made in the context of a conversation about race as a *biologically hardwired* and *informative* trait about a person, the same colorblind response is perceived as less prejudiced, and elicits less feelings of anger and discomfort for racial minority participants. Study 7 suggests that the reason this happens is because the function of a colorblind response is to *disagree* with whichever aspect of race the context is discussing, thus imbuing its meaning with either a *denial* of the social realities of race message, or with an *anti-essentialist* meaning.

Study 8 extends this framework to explain how a colorblind statement coming from a Black individual may be understood differently compared to the same statement coming from a White individual: when made by a Black individual, a statement minimizing attention to race is

interpreted as a message against racial essentialism, but when made by a White individual, the same statement is interpreted also as a denial of the social realities of race.

There are several limitations to this work. First, with the exception of the community college sample in Study 6, the racial minorities used in these studies were heavily Asian American college students, may not be representative of how all racial minorities may react in these scenarios. In addition, these studies were based on imagined reactions. That is, although participants were led to believe that the speakers were in fact their fellow classmates, and they believed the audio recordings to be real clips of interviews, they did not actually interact with the person. Their anticipated reactions are based on self-report data only. Finally, although the findings from our studies support our predictions and the assumptions we were making, we did not conduct a true test of mediation. Future work could aim to recruit a more representative and diverse sample of racial minorities, create a study design in which the racial minority participant actually engages with the colorblind speaker, and include a true test of mediation.

GENERAL DISCUSSION

Overview of findings

At the beginning of this work, we sought out to make sense of the conflicting findings surrounding colorblind ideology. To do so, in Part 1, we took a ground-up approach, by gathering all measures created to measure colorblind endorsement and testing to see whether they showed consistent interrelations with each other, as well as consistent correlations with other measures of race-relevant attitudes and behaviors. Across 3 studies, our results revealed at least two, possibly three, meaningfully distinct clusters of colorblind ideas. Specifically, we found that colorblindness defined as *racism denial* or an *avoidance of discussing race* is a distinct idea, and with diametrically opposite associations, from colorblindness defined as an *affirmation of common humanity*. Distinguishing between these ideas that were all traditionally

considered colorblindness was further predictive of different race-relevant behaviors of consequence, such as voting for policy, money allocation, and comfort and desire for intergroup interactions.

We also showed that these distinct clusters of colorblind ideas are orthogonal to each other. That is, one's belief in affirming our common humanity need not preclude a belief that racism is an issue, or a desire to appreciate cultures and address racial inequality. This distinction is important because it can allow for both; one need not reify racial categories or increase a reliance on racial stereotypes if one is committed to eradicating racial inequality. On the flip side, it also means that one can be cognizant about treating all humans fairly and with equal respect regardless of race, without ignoring the important racial and ethnic identities that were shaped by living in a world structured around the concept of race.

From these clusters of colorblind ideas that arose out of statistical methods, we generated a framework through which we could understand them. That is, we identified the underlying reason for why such seemingly similar statements—all of which call to minimize attention to race in some way—could behave so differently. We called upon an existing discussion about the multifaceted and complex nature of the race concept (Smedley & Smedley, 2004; Markus & Moya, 2010; Richeson & Sommers, 2016), and applied it to colorblind ideology to make sense of the seemingly contradictory findings. That is, we showed that the *racism denial* and *avoid discussing race* forms of colorblind belief are related to minimizing attention to the *social realities* of race, while the *affirmation of common humanity* form of colorblind belief is related to minimizing attention to *race as biologically rooted and informative* part of a human's personhood.

These two conceptions of race have different histories and play different roles in racial minorities' lives. One was used to justify the oppression of people based on the color of their skin, the other was the social reality that arose from that oppression, which continues to persist despite the previous concept being scientifically refuted. Today, viewing race as an essentialized entity is often associated with greater feelings of prejudice, overreliance on stereotypes, and acceptance of racial inequality (Keller et al., 2005; Bastian & Haslam, 2006; Williams & Eberhardt, 2008). Viewing race as a part of social reality, in contrast, is about acknowledging that society has been structured around race, and influences how people are treated, the opportunities they have, and how they come to see themselves. Thus, the meaning of a colorblind belief, and the consequences that follow it, can look very different depending on which concept of race the endorser has in mind.

In Part 2, we use these distinctions that were identified in terms of colorblind endorsement, and extend them to understand a racial minority's perceptions of a person who expresses a colorblind belief. Specifically, we show that a person who is explicitly trying to minimize attention to the *social* realities of race (i.e., makes a *racism denial* or *avoid discussing race* statement), is perceived as prejudiced, while a person who is explicitly trying to minimize attention to the idea that race is an *essential entity* (i.e., makes an *affirmation of common humanity* statement), is perceived as less prejudiced.

However, these effects largely depend on the context in which the colorblind statement is made. Specifically, we show that whatever concept of race is being implied in the larger conversation is what imbues the colorblind statement with meaning, sometimes even more so than the content of the colorblind statement itself. Specifically, when the topic of conversation is about acknowledging the *social* realities of race (e.g., recognizing that some racial groups enjoy

advantages that others don't, while other racial groups suffer disadvantages that others don't), a person responding with a colorblind statement (e.g., "I don't think race is important") is perceived to disagree with the conception of race that is implicit in the larger conversation, and thus is seen to take on a *denial of social realities* meaning. When the topic of conversation is claiming that race is an *essentialized* entity (e.g., the color of someone's skin can tell you a lot about a person's traits and abilities), a person responding with the same colorblind statement is perceived to disagree now with *that* conception of race, and the statement takes on an *anti-essentialist* meaning.

Importantly, the reverse of this is true for the color-conscious response. That is, when a person responds to a conversation acknowledging the social realities of race with a color-conscious statement (e.g., "I think it's important to recognize differences between races"), they are perceived to affirm the conception of race that is implicit in that topic of conversation. When they respond to a conversation claiming race as an essentialized entity, the same response is perceived to affirm *that* conception of race.

The implications for distinguishing between the different conceptions of race extends beyond just clarifying our understanding of colorblind ideology. It also helps clarify our understanding of multiculturalism as well. For instance, although a multicultural approach is generally more favored by social scientists because of its role in promoting cultural awareness, allowing for discussion of race-based power differences, and feelings of being valued and included among racial minorities (Plaut, Thomas, & Goren, 2009; Todd & Galinsky, 2012; see Rattan & Ambady, 2010; Plaut, 2014), research shows that there are situations when it may backfire (Purdie-Vaughns & Walton, 2011; Wilton et al., 2018; Zou & Cheryan, 2014). For instance, multiculturalism runs the risk of pigeonholing racial minorities, signaling to them that

they are only valued and seen as a representative of their race, without acknowledgement of their own individual merit. Among White Americans, it has been shown to increase reliance on stereotypes, promote feelings of dissimilarity and exclusion, and increase beliefs in racial essentialism (Wolsko et al., 2000; Wilton, Apfelbaum, & Good, 2018; Plaut, Garnett, Buffardi, & Sanchez-Burks, 2011; Gutierrez & Unzueta, 2010; Zou & Cheryan, 2015).

Our work adds to this literature, by showing that one reason multiculturalism may backfire is when one fails to distinguish between calling recognition of race as an *essentialized* entity versus calling recognition to race as a *social* reality. Calling recognition to race as an *essentialized* entity is what may lead to greater reliance on stereotypes and an indifference to racial inequality (e.g., Williams & Eberhardt, 2008). In contrast, calling recognition to the *social realities* of race, such as cultural practices, racial and ethnic identities, and the acknowledgment of existing race-based power differences, is what may lead to appreciation for diverse peoples and allow for the language necessary to combat existing inequalities (e.g., Saguy et al., 2008; Banfield & Dovidio, 2013).

In sum, this work adds to the growing body of literature that recognizes that the simple colorblind vs. multicultural distinction between diversity ideologies may not be enough (Hahn et al., 2015; Plaut et al., 2018; Purdie-Vaughns et al., 2008; Purdie-Vaughns & Walton, 2011; Rattan & Ambady, 2013; Rosenthal & Levy, 2010; Yogeeswaran et al., 2018). There are many factors that contribute to the meaning and consequences of a given diversity statement. In this work, we highlight a few: (1) it is important to consider whether the statement is about recognizing or minimizing attention to race as a *social* reality or *essentialized* entity, (2) it is important to consider which conception of race is implicit in the larger conversation in which the

statement is made, and (3) the perceived meaning may depend on whether the person expressing the colorblind statement is black or white.

Theoretical contributions

In addition to introducing the distinction between race as an essentialized entity versus race as a social reality, and highlighting the importance of context in interpreting the meaning of a colorblind statement, this work offers other theoretical contributions to the literature.

First, this research suggests a way to connect colorblind research with research on the Common Ingroup Identity model (see Dovidio, Gaertner, & Saguy, 2009; Gaertner & Dovidio, 2012; Dovidio, Gaertner, & Pearson, 2016, for reviews). The Common Ingroup Identity strategy for reducing intergroup prejudice is not often included in literature reviews of colorblind research (e.g., Rattan & Ambady, 2013; Plaut, 2010), though some of its underlying ideas are indeed present in some definitions of colorblindness (e.g., Levin et al., 2012; Hahn et al., 2015) and the results of *those* studies are reported in the reviews. Our research suggests that connecting the research on colorblind ideology with the Common Ingroup Identity Model may help clarify some of the conflicting findings found within colorblind research.

Specifically, the Common Ingroup Identity Model has been shown to be an effective strategy for prejudice reduction because it breaks down the divisions between subgroups by directing attention to the commonalities that all groups share. In this way, previous outgroups can be considered ingroups, thus capitalizing on the affinity that people inherently feel for their ingroup. In the present research, we found that “colorblind” statements that are more focused on *affirming our common humanity* (versus statements that focus on *denying racism* or *avoiding mention of race*) are indeed associated with less racial bias, greater personal values to be unprejudiced, more egalitarian beliefs, and greater interest and comfort engaging in interracial interactions. In fact, the belief in affirming common humanity co-existed with an appreciation

for different cultures, and support for race-conscious policy, which is in line with research on a variant of the Common Ingroup Identity Model – the Dual Identity Model (see Dovidio, Gaertner, & Pearson, 2016 for a review).

This variant—which focuses on the shared superordinate identity *as well as* acknowledging subgroups within that common identity—was one way to address the known shortcomings of the Common Ingroup Identity Model. Specifically, focusing *only* on the superordinate identity may improve attitudes and increase warmth toward former outgroup members, but it also prevents recognition of the subgroup divisions that are currently socially relevant, thus interfering with the possibility of acknowledging power differences (Banfield & Dovidio, 2013; Dovidio et al., 2009; Saguy et al., 2008). The Dual Identity Model, in contrast, managed to improve attitudes through acknowledging commonality, while *also* allowing room to discuss subgroup-based power differences.

These nuances in how a Common Ingroup Identity can be modeled may help us understand the weak associations between endorsement of common humanity and race-relevant attitudes and beliefs. Thus, future work may wish to further distinguish between an affirmation of common humanity that is paired with appreciating culture and wanting to talk about race, and an affirmation of common humanity that is paired with not appreciating culture and not wanting to talk about race.

Second, this work is the first to examine the consequences of diversity ideologies as represented by an individual *expressing* such belief. Previous research has focused largely on the effects of interacting with individuals who were primed with a diversity ideology, or the effects of interacting within a larger institutional culture that endorses a diversity ideology. Missing from the conversation are the effects of hearing *individuals* making colorblind statements. The

exception to this is in microaggressions research, in which the researchers include statements like “when I look at you, I don’t see color” as microaggressions, because such statements invalidate and deny a person of color’s racial or ethnic being (Sue et al., 2007). Our work expands on these examples of colorblind statements to include other types of colorblind statements that have identified in the literature, and introduces the role of context in the interpretation of such statements. Specifically, we show that not all colorblind statements are necessarily microaggressions—it may depend on what is inferred by “race,” as well as the topic of the larger conversation in which the comment is made.

Finally, to our knowledge, Study 2b is one of the first to examine the extent to which the day of data collection affect the results. The results suggest that the present findings, particularly for the White participants, are relatively robust, revealing similar patterns of correlation regardless of the day of data collection, which spanned across historically important events that were relevant to the construct being studied.

Implications

There are several implications of this research for how we talk about race in everyday life. First, this work urges us away from making blanket recommendation about recognizing or minimizing race. Organizational and institutional diversity statements may wish to avoid misinterpretation of the intent of their diversity approach by specifying what they mean when they say that they value and recognize difference, or that they do not pay attention to background.

In addition, distinguishing between the two ways of thinking about race may help clarify some of the confusion regarding use of colorblind rhetoric. For instance, many well-intentioned Whites may hope to emulate the ideals of justice and equality being expressed by African

Americans. But without specifying the particular conceptualization of race they are attempting to minimize, they may be inadvertently communicating the wrong message. For example, given that a colorblind statement made by a White individual was perceived to take on a *denial of social realities of race* meaning by default, a White individual who actually intends to convey the *anti-essentialist* meaning of colorblindness may do well to acknowledge the *social realities* of race first.

Distinguishing between these two meanings of race may also help prevent the erroneous logic that anti-egalitarians might be tempted follow. For example, there are many examples of politicians opposing affirmative action policies and citing Martin Luther King's dream of a colorblind world as justification. This work suggests that there is a difference between downplaying race with regard to *essentialist* beliefs—which in effect challenges the basis for prejudice and discrimination—and downplaying race with regard to its *social reality*—the denial of which only ignores systemic racism and perpetuates an unequal system.

Constraints on generality

It is important to underscore that the colorblind distinctions spelled out above may only be relevant for understanding colorblind beliefs among Whites. Our analysis of the data provided by African Americans (reported in the Supplement, Section 3.3) suggest that their endorsement of the colorblind items also reflect multiple distinct constructs, although their associations with the race-relevant attitude scales were weaker and showed greater day-to-day variation, suggesting greater ambiguity in the concept. Thus, we refrained from drawing strong inferences from these data. Needless to say, further work is needed to understand the potential meanings of colorblindness for African Americans (Purdie-Vaughns & Walton, 2011; Pauker et al., 2015;

Speight et al., 2015; Neville et al., 2005), and how different meanings may be highlighted in different contexts.

In Study 8, we found that a colorblind statement paired with a black photo was perceived to take on an anti-essentialist meaning more so than a denial of social realities meaning. It is important to note that we are not saying that all African Americans will be interpreted to take on an *anti-essentialism* meaning. For instance, TV star Raven-Symoné received backlash when she stated “I’m not African American, I’m American” in an interview with Oprah Winfrey (Lindner, 2014). For many racial minorities, this statement was perceived as a rejection of her minority status, and thus, a denial of the important social realities that race played in their own lives. A denial coming from one’s own ingroup can be even more hurtful compared to a denial coming from one’s outgroup. Raven later qualified her original response by specifying that her intent was an anti-essentialist one. However, this example demonstrates that it may be fruitful to acknowledge the social realities of race before making an anti-essentialist statement, regardless of whether one is a racial minority or not.

It is important to note that the present studies examined the colorblind beliefs represented in the 69 items we identified in Study 1. They represent all the items from existing measures of colorblind ideologies, supplemented by new items we wrote to reflect conceptualizations from research that operationalized colorblindness through experimental manipulations rather than in the form of measures of individual differences. Nevertheless, there may be other, equally or even more important, kinds of “colorblind” beliefs.

In addition, although Study 4 identified two conceptualizations of race as a key factor underlying the different types of “colorblind” ideas, there may well be other factors that are also important. We call for future research to continue to explore other types of “colorblind” beliefs

and factors that underlie them, and ultimately create a systematic "map" of colorblind ideas to help achieve a more comprehensive and accurate understanding of the type of colorblind beliefs, their consequences, and the factors that underlie them.

Along the same lines, it is important to note that there may be other important interpretations of colorblind statements that were not captured in this research. For example, anecdotally, when debriefing participants during Study 8, some participants remarked that they thought the White speaker who said "I wish society would stop focusing so much on race" could mean that they are aware of the social realities of race (i.e., they are not necessarily denying it), but they are just tired of talking about it because they genuinely do not think it is productive. Future work could examine other interpretations of colorblind responses, and whether those can lead to different outcomes.

Conclusion

In sum, based on the present results, it appears that there are at least two, possibly three, distinct and meaningful clusters of ideas that are often considered simply instances of colorblindness. They relate differently to race-relevant attitudes and beliefs, have different behavioral consequences, and they seem to reflect different conceptualizations of race. Distinguishing among them may provide greater clarity in our effort to understand the antecedents and consequences of "colorblind" beliefs. Part of distinguishing among them is in recognizing that race is a multifaceted and complex construct. Rather than making blanket statements about whether one should ignore or acknowledge race, or whether or not one thinks race is important, we can recognize the complexities surrounding race, and be more specific. We urge the scientific community to continue exploring the psychological functions of colorblind

ideology in a theoretical framework that explicitly considers the possibility that there can be diverse and functionally distinct beliefs within colorblind ideology.

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Appendix

The top 5 existing colorblind items that represent each cluster, plus 2 “core” items representing each construct, which were written based on the *entirety* of the cluster meaning (i.e., item content plus pattern of associations). The full list is in Supplemental Materials Section 4.

Cluster 1A: “Racism denial”

Top 5 most representative existing items:

1. Neville_Privilege5: Racial and ethnic minorities do not have the same opportunities as white people in the U.S. (reversed)
2. Neville_Privilege1: White people in the U.S. have certain advantages because of the color of their skin. (reversed)
3. Neville_Privilege7: White people are more to blame for racial discrimination than racial and ethnic minorities. (reversed)
4. Neville_Privilege3: Race plays an important role in who gets sent to prison. (reversed)
5. Neville_Blatant6: Racism may have been a problem in the past, it is not an important problem today

Core items we wrote to represent the entirety of the cluster meaning:

- A. Discrimination against racial minorities is no longer a major problem in the United States.
- B. Race does not play a role in people’s chances to get ahead anymore.

Cluster 1B: “Avoid discussing race (to maintain status quo)”

Top 5 most representative existing items:

1. Mazzocco4: Society would be better off if we all stopped talking about race.
2. Knowles_Procedural2: The same rules and regulations should apply to all groups regardless of their race (e.g., race should not be considered when making decisions such as school admissions), even if that means existing racial inequalities continue.
3. Knowles1: I wish people in this society would stop obsessing so much about race.
4. Knowles_Procedural1: The same rules and regulations should apply to all groups regardless of their race (e.g., race should not be considered when making decisions such as school admissions).
5. Mazzocco1: Nothing good will come out of continuing to focus on race.

Core items we wrote to represent the entirety of the cluster meaning:

- A. Society would be better off if we all stopped focusing so much on how people's race affects their lives in society.

- B. People's race should not be considered when organizations make decisions (e.g., school admissions decisions) even if the goal is to reduce racial inequalities.

Cluster 2: “Emphasis on common humanity (for intergroup harmony)”

Top 5 most representative existing items

1. Ryan2: Recognizing that all people are basically the same regardless of their ethnicity would improve intergroup relations.
2. Hahn3: In order to achieve a harmonious society, we must stop thinking of Americans with different racial backgrounds as different from each other, and instead focus on what makes us similar.
3. Rosenthal3: At our core, all human beings are really the same, so racial and ethnic categories do not matter.
4. Ryan1: Judging one another as individuals rather than members of an ethnic group would improve intergroup relations.
5. Apfelbaum4: If everyone paid less attention to race and skin color, we would all get along much better.

Core items we wrote to represent the entirety of the cluster meaning:

- A. The world will be a better place if more people affirm the common humanity that we all share, regardless of race.
- B. To improve our society, we must learn to pay less attention to skin color and embrace the fact that as human beings, we are fundamentally no different from each other.

Cluster 3: The miscellaneous cluster / “General opposition to racial categorization”

Top 5 most representative existing items

1. Goff2: Seeing people in terms of race breeds interracial mistrust and prejudice.
2. Goff3: Seeing people in terms of race creates inequality among racial groups.
3. Rosenthal4: All human beings are individuals, and therefore race and ethnicity are not important.
4. Goff1: Seeing people in terms of race contributes to racial tension for everyone.
5. Goff11: Seeing people in terms of race is a significant hindrance to racial harmony.