RESEARCH ARTICLE

U.S. ethnic minorities’ attitudes towards Whites: The role of shared reality theory in intergroup relations

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Abstract

In the current research, we suggest that shared reality, the belief that one perceives the world the same way as another group, can predict attitudes towards that group. We tested shared reality theory in the context of American ethnic minority groups’ (i.e. African Americans, Asian Americans, and Latinas/os) attitudes towards White Americans. In surveys of two samples recruited from different geographical locations in the USA, we tested predictions derived from different theories of intergroup relations. Using mediational analysis, we defined models to assess the extent to which shared reality theory predicted—directly and indirectly—prejudicial attitudes towards Whites. We tested the model derived from shared reality theory against other theoretical alternatives. Taken together, the results of the research indicated that shared reality predicts attitudes towards White Americans among these three ethnic groups. Thus, shared reality is a relevant, though largely overlooked, factor in intergroup dynamics.

Shared reality theory (Echterhoff, 2012; Echterhoff, Higgins, & Levine, 2009; Hardin & Conley, 2001; Hardin & Higgins, 1996) addresses people’s motivation to establish a shared understanding with others. Achieving shared understanding is important inasmuch as it helps people develop, maintain, and regulate interpersonal relationships (Baldwin, 2001; Baldwin, Carrell, & Lopez, 1990; Sinclair, Hardin, & Lowery, 2006; Smith & Semin, 2007). Shared reality theory has two fundamental tenets. First, people determine what is true or real by seeking verification from others about these facts, as demonstrated through any number of classic social psychological phenomena, including the autokinetic effect (Sherif, 1935) and the Asch conformity paradigm (Asch, 1952; Hardin & Higgins, 1996).

The second tenet of shared reality—more pertinent to the current research—is that the establishment of shared understanding or beliefs about an external referent or object is crucial for the development and sustenance of relationships. In sum, shared reality theory suggests that one’s thoughts, attitudes, and reasoning are influenced by one’s interpersonal experiences and, simultaneously, one’s thoughts, attitudes, and reasoning regulate the dynamics of interpersonal relationships (e.g. Echterhoff, 2012; Echterhoff, Kopietz, & Higgins, 2013; Echterhoff et al., 2009; Hardin & Conley, 2001; Hardin & Higgins, 1996). Consequently, relationships are supported to the degree to which individuals agree or share a perspective and weakened to the degree that individuals disagree or do not share a perspective.

We expanded this second tenet of shared reality theory to address intergroup (as opposed to interpersonal) relationships in the current research. Specifically, we suggest that shared reality, the belief that one perceives the world the same way as another group (e.g. Baldwin, 2001; Sinclair et al., 2006), can predict attitudes towards that group. We tested shared reality theory in the context of multiple American ethnic minority groups’ attitudes towards White Americans.

According to shared reality theory, people develop relationships with one another by establishing a consensus about what is real and true. If people cannot establish an agreement about reality and truth (i.e. if they cannot share reality) with another person, the relationship will quickly cease. These processes can occur in our daily social interactions—consider, for instance, a conversation in which one party refuses to agree with basic conversational points that the other speaker is
making. If this conversation occurred among two previously unacquainted individuals, it is highly unlikely that they will become friends. Persistent interactions of this type among people who know each other would preclude the individuals involved from deepening their relationship. Thus, according to shared reality, relationships cannot begin or be maintained without relationship partners acknowledging each other’s reality.

Shared reality regulates social interactions among individual members of different groups (Conley, Rabinowitz, & Hardin, 2010). Conley et al. (2010) demonstrated that previously unacquainted American Blacks and Whites interacting with members of their own ethnic group felt more positively about their ingroup interaction partners when reminded of the highly racially charged O.J. Simpson trial than when reminded of a variety of control stimuli. By contrast, pairs composed of one White individual and one Black individual felt worse about each other after being reminded of the trial. In accordance with shared reality theory, these findings suggest that when participants were reminded about a topic about which Blacks and Whites were presumed to disagree (i.e. the O.J. Simpson verdict), Blacks and Whites felt less connected to their outgroup interaction partners but more connected to partners of their own ethnic group. Likewise, Blacks’ relationships with other Blacks and Whites’ relationships with other Whites were improved by reminders of the trial, because this was an issue associated with intragroup agreement. In sum, shared reality—to a greater extent than alternative hypotheses such as group identities or personal similarity—regulated relationships between American Whites and Blacks.

Shared reality theory thus far has been used to determine the extent to which shared beliefs regulate relationships between two individuals who belong to (the same or) different groups. In the current research, we sought to apply shared reality not just to the likelihood of agreement with a particular member of a social group, but also to illustrate that perceptions of shared reality can regulate attitudes towards groups as a whole. To our knowledge, this is the first time that shared reality theory has been utilised to understand relationships between groups as a whole, rather than to illuminate relationships between individual members of those groups (e.g. Conley et al., 2010; Sinclair & Huntsinger, 2006). In this vein, we aimed to assess the role of shared reality in contrast to other theoretical frameworks (e.g. intergroup contact and realistic group conflict) to explain attitudes towards a dominant group. To achieve this goal, we departed from the experimental methods commonly utilised to test shared reality theory. Experimental methods are cumbersome when addressing relationships between entire groups (e.g. no one interpersonal interaction can represent attitudes towards an entire ethnic group) and are not widely employed in large-scale and representative research on intergroup relationships. Therefore, we developed a survey to test the tenets of shared reality. Beyond the theoretical expansion of shared reality by looking at groups, such an approach could provide a way for shared reality to be incorporated into large-scale intergroup relationship studies that are often conducted utilising survey methodologies. As a result, the current research examines shared reality theory in a more global, group context (i.e. American ethnic minority groups’ attitudes towards White Americans) rather than the individualistic, interpersonal context in which it has previously been studied.

Shared Reality and Attitudes Towards White Americans

In the past 15 years, a few studies have finally emerged addressing minority group members’ (e.g. African Americans, lesbians and gay men) perceptions of dominant group members (e.g. Whites, heterosexual people; Conley, Calhoun, Evett, & Devine, 2001; Conley, Rabinowitz, & Rabow, 2010; Shelton & Richeson, 2006; Johnson & Lecci, 2003; Monteith & Spicer, 2000; Tropp & Pettigrew, 2005). Because shared reality theory addresses basic processes about the development and maintenance of relationships, we can use it to derive predictions about US minority group attitudes towards White Americans. The fundamental nature of shared reality suggests that it would form the basis for other aspects of attitudes towards Whites, such as realistic conflict, perceived discrimination and positive contact. For example, shared reality suggests that if a group believes it is in agreement with another group, the two groups are not as likely to feel in competition with one another (realistic group conflict), are not as likely to experience discrimination from one another (perceived discrimination) and are most likely to have positive experiences when interacting with one another (positive group contact).

Moreover, we suggest that a lack of shared reality with another group would be especially likely between dominant and marginalised groups. Lived experiences, worldviews and beliefs of US ethnic minorities and Whites diverge based on their locations in the social hierarchy. The USA has a long and troubled racial history in which White Americans have consistently had more power and resources than people of colour. Consequently, shared reality should be more applicable to the minority perspective because members of
subordinated groups are less attended to by majority groups and less understood by dominant groups than vice versa (e.g. Fiske, 1993). Marginalised group members may be more attuned to agreement or disagreement with the dominant group, given the amount of power that dominant groups have relative to marginalised groups. Minority groups are more aware of the extent to which they agree or disagree with the dominant group given that disagreement can further oppress minority group members (e.g. in terms of access to jobs and resources). Ultimately, shared reality theory may help explain relations between ethnic minorities and Whites and, consequently, elucidate additional theoretical perspectives on intergroup relations.

Additional Theoretical Perspectives on Attitudes Towards Whites

Although the primary focus of our research is shared reality theory, we prefer to examine shared reality processes in the context of other theories rather than testing the theoretical tenets in isolation. The current research is one approach to integrating a variety of theoretical perspectives to better understand the role of shared reality in perceptions of White Americans among Latinas/os (i.e. individuals whose lineage is from Spanish-speaking regions of the Americas), African Americans and Asian Americans. By addressing various theories, we can identify the ways that shared reality interacts with dominant perspectives in the field of intergroup relationships and prejudice.

Given that shared reality is conceived of as foundational to the development of relationships, we suggest that perceptions of shared reality theory with Whites will predict prejudice—on its own and in concert with realistic conflict theory, shared identities, positive intergroup contact and perceptions of discrimination. We now consider each of these perspectives, and their relationship to shared reality, in turn.

Realistic Conflict

Realistic conflict theory states that prejudice emerges out of competition for desired resources (Bobo, 1983; see Sherif, Harvey, White, Hood, & Sherif, 1988, for a review). Thus, groups that are competing for scarce desired resources should be especially likely to have fractious intergroup relations. Accordingly, realistic conflict theory predicts that ethnic minorities should have more negative feelings towards Whites to the extent that they perceive themselves to be in competition with Whites. We believe that shared reality should predict feelings of competition. That is, we conjecture that perceiving agreement or consensus with Whites should lead individuals to construe less competition between groups. In essence, shared reality creates a halo effect that leads to more positive perceptions of the group with whom an individual is in agreement and, hence, lesser perceptions of competition. Moreover, to our knowledge, realistic conflict theory has not been tested in the context of Blacks’ attitudes towards Whites or, for that matter, in the context of marginalised groups’ attitudes towards any other group. Thus, in addition to testing how this theory operates in concert with shared reality theory, the current research also advances realistic conflict theory by testing it in the context of minority group’s attitudes towards majority groups.

Group Identities

The perception of belonging to a particular group clearly regulates intergroup dynamics (e.g. Brewer, 1991; Crocker & Major, 1989; Sidanius, Pratto, & Rabinowitz, 1994). Conley et al. (2010) suggested that group identities might be effective at promoting positive relationships between group members (often conceptualised as feelings of closeness among groups) precisely because people assume that those who are members of the same group share reality with one another. Thus, people who are not members of the same group could also develop more positive attitudes towards one another by considering agreement between their groups. By this logic, group identities per se are not the cause of positive feelings towards ingroup members, but rather group identities serve as a proxy for the belief that one will have consensus with the people in one’s group. We suggest that shared reality will statistically predict closeness to members of other groups (an assessment of shared identities—see Dowley & Silver, 2000; Levin, Sidanius, Rabinowitz, & Federico, 1998; Sidanius et al., 1994) in our models.

Positive Intergroup Contact

Tropp and Pettigrew (2005) have convincingly demonstrated the pervasive power of positive intergroup contact to shape attitudes towards a variety of stigmatised groups. Moreover, Tropp and Pettigrew examined non-White groups’ attitudes towards Whites. One possible avenue for this mechanism would be that assuming agreement with Whites might actually motivate participants to seek out interpersonal contact with Whites, or to be more open to quality contact during actual encounters. This in turn could influence ethnic minorities to feel more positively towards Whites.
Perceived Discrimination

Johnson and Lecci (2003) demonstrated that perceived discrimination—a factor that would not be relevant when considering dominant group members’ attitudes towards marginalized groups—predicts African Americans’ attitudes towards White Americans. That is, Blacks’ attitudes towards Whites are negative to the extent that Blacks expect to perceive discrimination from Whites. Building upon these findings, we suggest that the feeling that one does not share reality with another group is likely to heighten feelings of perceived discrimination. Thus, we predicted that shared reality would negatively predict perceived discrimination in our model. In other words, based on shared reality theory, sharing reality with Whites should reduce perceived discrimination and bolster positive attitudes towards Whites.

Summary

In sum, we suggest that, according to shared reality theory, the perception of agreement is so fundamental that it should promote more positive perceptions of the intergroup context, as supported by each of these theories and perspectives, which should in turn be associated with less prejudicial attitudes towards Whites. That is, shared reality should improve relationships (or the perception of relationships), because, according to shared reality theory, the perception of consensus is the foundation of relationships. Specifically, we predicted that the agreement between Whites and ethnic minorities would be associated with lesser competition for resources (realistic conflict theory), enhanced closeness between the groups (group identities), more positive interactions and contact between the groups (positive intergroup contact) and reduced feelings of discrimination (perceived discrimination). Together, these theoretical constructs can be used to make predictions about attitudes and feelings towards Whites. Furthermore, we advance shared reality by arguing more specifically that, in this case, consensus should strengthen relations in the form of broad group perceptions, not just in the form of individual relationships between two members of different groups. Notably, the current research is not experimental and does not directly address causality, but we can test the merit of shared reality as a meaningful individual difference predicting US ethnic minority groups’ attitudes towards Whites.

The Current Research

The current research assessed the role of shared reality in intergroup relationships, focusing on a variety of non-White groups’ attitudes towards Whites. In two samples of participants, we assessed the attitudes of African Americans, Asian Americans and Latinas/os towards White Americans by employing a shared reality framework. We also assessed perceptions of realistic conflict, closeness to Whites, positive intergroup contact, perceived discrimination and reported prejudice towards Whites. We used mediational analysis to examine the extent to which shared reality can predict prejudicial attitudes towards Whites among these three groups. Furthermore, we contrasted models derived from shared reality theory with models that specified perceived closeness to Whites (a measure of group identities) as the primary agent of intergroup conflict. Because shared reality and closeness are conceptually related, such that sharing reality with another group might enhance closeness and feelings of closeness might help to establish shared understanding, this contrast represents a particularly strong test of shared reality theory.

Our primary hypothesis concerned the effectiveness of shared reality in explaining attitudes of African Americans, Asian Americans and Latinas/os towards Whites. We utilised versions of a number of intergroup relationships scales to assess reactions to Whites and to model those attitudes via mediational analysis. To compare shared reality with other constructs, we incorporated measures related to realistic conflict, intergroup contact, social identities (i.e., closeness to Whites), perceived discrimination and prejudice towards Whites.

Finally, we also examined whether the shared reality process was similar or different across the three ethnic groups we studied. African Americans, Asian Americans and Latinas/os have very different histories in the USA and, hence, distinct relationships to Whites. It is reasonable, therefore, that these groups’ perspectives about Whites, or their processes of relating to Whites, may also be different. However, the relationship between African Americans and Whites is the standard model of intergroup relationships in the USA (Shelton, 2000). By testing differences between ethnic groups, we can provide some insight into the question of whether Black–Whites relationships in the USA should serve as a working model for other types of intergroup relationships.

METHOD

Participants and Procedure

Sample 1

The sample (N=260) included 31% African Americans, 28% Asian Americans and 41% Latinas/os. Women made up 63% of the sample. The mean age was
20 years. Participants were recruited from the introductory psychology subject pool at a large university in the western USA and came to a research laboratory to participate. They completed the survey in exchange for credit towards their introductory psychology courses. This research project was part of a larger project with multiple collaborators; thus, participation entailed completing a questionnaire with a variety of measures of stereotypes and attitudes towards Whites and members of other groups. However, we only discuss sets of items from the survey that are directly related to our current aims. The completion of the entire questionnaire took 30–45 min.

Sample 2
The sample consisted of 330 participants, of whom 39% was African American, 25% was Asian American and 39% was Latina/o. The mean age was 26 years, and 65% of the sample was female. Participants were recruited in public spaces of both a large Midwestern university and in the surrounding metropolitan area.

Survey Instruments

Sample 1
Because of space constraints with the questionnaire that involved multiple collaborators, it was necessary to incorporate abbreviated versions of some of the scales of interest. In each case, we attempted to identify items that were most central to the meaning of the entire questionnaire. Furthermore, we adapted some of the measures to ensure that the items were appropriately phrased to match the target group of interest for the current research (i.e. so that all items addressed attitudes towards Whites). The scales are described more specifically in the succeeding text.

Shared Reality. We created and used a single item to measure perceived consensus (i.e. shared reality) with Whites: ‘How much do you think you agree with White Americans as a group?’ This item was measured on a 7-point scale (1 = Very little, 7 = A lot), such that higher numbers reflected greater agreement with Whites.

Group Conflict. Realistic conflict was measured by two items adapted from Bobo and Hutchings (1996). Specifically, we asked participants to indicate their agreement with the following items on 7-point scales (1 = Strongly disagree, 7 = Strongly agree), on which higher numbers indicated greater intergroup conflict: ‘The more influence White Americans have in local politics’ and ‘White Americans have been getting ahead economically at the expense of other groups’ (Cronbach’s α = .68).

Group Identities (Differential Closeness to Whites). We measured the extent to which participants shared identity—often conceptualised as feeling close to one’s ingroup vis-a-vis another group—by creating a difference score with two items adapted from those used in the General Social Survey (Smith, Marsden, Hout, & Kim, 2011; see Dowley & Silver, 2000; Levin et al., 1998; Sidanius et al., 1994; for examples of using closeness as a proxy for group identities). Feelings of closeness were measured with the questions, ‘How close do you feel to White Americans?’ and ‘How close do you feel to your own ethnic group?’. Responses ranged along a 1-to-7 scale (1 = Not at all, 7 = Extremely). We then calculated the difference between each person’s score on own-group closeness and closeness to Whites. These differential closeness scores were then recoded back to a 1-to-7 scale, so that the unstandardised coefficients reported in the succeeding text can be more easily interpreted. Higher scores entailed greater closeness to the ingroup, relative to perceived closeness to Whites.

Intergroup Contact. Participants responded to the item, ‘How much time have you spent interacting with Whites?’ The item was presented on a 7-point scale (1 = Very little, 7 = A lot), on which higher numbers indicated a greater amount of time spent with Whites.

Perceived Discrimination. We developed a single item to measure participants’ perceptions of discrimination at the hands of Whites (cf. Johnson & Lecci, 2003): ‘I have been discriminated against by Whites on the basis of my ethnicity.’ Participants indicated their agreement with the item on a 7-point scale (1 = Strongly disagree, 7 = Strongly agree), on which higher numbers reflected greater perceived discrimination.

Prejudice towards Whites. We adapted items from the Blacks’ Attitude towards Whites (ATW) scale, a multi-factor measure African Americans’ attitudes towards Whites developed by Brigham (1993). We utilised this measure because it was relatively easy to modify it so that it addressed multiple ethnic groups’ attitudes towards Whites. The ATW was abbreviated to fit into the allotted time for participants to complete the full questionnaire; thus, nine items were used to assess prejudice towards Whites. Some of the items had to be adjusted to make them applicable for understanding a variety of groups’ attitudes towards Whites. For
example, we changed the language of ‘Blacks’ to ‘Latino/as’, ‘Asian Americans’, or ‘my ethnic group’ where necessary. Further, we ensured that none of the items were exclusive to Blacks’ relationships with Whites (e.g. ‘By and large, I think that Blacks are better athletes than Whites’) given that such items would not be relevant to the group identification of Latino/as or Asian Americans in the sample. Participants answered these questions on 7-point scales (1 = Strongly disagree, 7 = Strongly agree; Cronbach’s α = .88).

Sample 2

Participants completed a survey instrument similar to that of Sample 1 but with additional questions for the shared reality and the intergroup contact measures. The group identities (differential closeness) variable was measured the same way as with Sample 1.

**Shared Reality.** We created a 7-item, shared reality scale to assess the extent to which participants share reality with Whites (Cronbach’s α = .81). The items were the following: ‘Whites and I share the same outlook on the world’; ‘My attitudes are quite similar to those held by my White person’; ‘Most White people haven’t gone through the same experiences that I have’ (reverse-scored); ‘If I were to interact with a White person, chances are good that we would agree about lots of things’; ‘I don’t agree with Whites about most social and political issues’ (reverse-scored), ‘Whites and I share the same outlook on the world’; ‘My life history is pretty different from that of most White people’ (reverse-scored); and ‘In general, my viewpoints are directly opposed to those of Whites’ (reverse-scored). Participants indicated their agreement with the items on a 7-point scale, such that higher numbers reflected stronger agreement with Whites.

**Group Conflict.** To assess realistic group conflict, we used the same two items from Sample 1 and added two more items from Bobo and Hutchings (1996), which were adapted to address attitudes towards Whites. In addition to those we used in Sample 1, we asked participants to indicate their agreement with the following items on 7-point scales, in which higher numbers reflected greater perceived conflict with Whites: ‘More good jobs for Whites mean fewer good jobs for members of my ethnic group’ and ‘As more good housing and neighbourhoods go to Whites, the fewer good houses and neighbourhoods there will be for members of my ethnic group’ (Cronbach’s α = .85).

**Intergroup Contact.** To measure participants’ extent of contact with Whites, we used the original items from Sample 1, as well as nine items that were adapted from a scale utilised by Wittig and Grant-Thompson (1998) to measure each theoretically important aspect of contact. Specifically, participants were given two contact scales, one focusing on their workplace and one focusing on their university. Participants completed both scales if they were employed and also a student. The set of nine items included the following: (1) ‘White students and students of my ethnic group are given equal status at my workplace (school)’; (2) ‘I frequently interact with other students at my workplace (school) who are White’; (3) ‘At my workplace (school), White employees (students) and employees (students) of my ethnic group pursue common goals’; (4) ‘None of my close friends at my workplace (school) are White’ (reverse-scored); (5) ‘There are days when I’m at work (school) that I don’t interact with any White person at all’; (6) ‘While at my workplace (school), I have come to know White people as individuals’; (7) ‘Whites at my workplace (school) contradict negative stereotypes that some people have about their group’; (8) ‘Supervisors at my job (Professors at my school) are supportive of positive interactions between Whites and members of my ethnic group’; and (9) ‘There are days when I am at work (my school) that I don’t interact with any White person at all.’ We used the workplace scale in the event that the participant both worked and was a student. (We chose to focus on workplace-related items because there was greater variance on the items about the workplace than on the university-related items.) If the participant did not complete the workplace questionnaire (i.e. if the participant was not employed), the university-related scale was utilised. Thus, we created a variable of intergroup contact that comprised either responses about a workplace setting or responses about the participant’s university. Participants responded to these items on 7-point scales (1 = not very true, 7 = very true; Cronbach’s α = .92).

**Perceived Discrimination.** In addition to Sample 1’s single-item assessment of perceptions of discrimination, we wrote six items that were informed by Johnson and Lecci’s (2003) scale. Participants rated their levels of agreement with the items on a 7-point scale, such that higher numbers reflected greater perceptions of discrimination: The items were the following: (1) ‘Sometimes I suspect that White supervisors treat me poorly because they have negative views of people of my ethnicity’; (2) ‘Whites have discriminated against me because of my race’; (3) ‘When I have a job interview with a White interviewer, I worry that my race will negatively affect my chances of getting a position’;
(4) ‘I believe that White salespeople give me the same treatment as shoppers of any other ethnicity’ (reverse-scored); (5) ‘If a White police officer pulled me over for speeding, I would feel confident of being treated fairly’ (reverse-scored); and (6) ‘I have never had a White person treat me poorly because of my ethnicity’ (reverse-scored; Cronbach’s $\alpha = .89$).

RESULTS

Unique Contribution of Shared Reality

As an initial test of the unique role of shared reality as a predictor of ethnic minority groups’ attitudes towards Whites, we ran a hierarchical-entry multiple regression analysis on the data from each sample. (Basic descriptive statistics, as well as the variables’ intercorrelations are presented in Tables 1 and 2.) We first regressed prejudice on shared reality alone. Then, on a subsequent step, we included the other intergroup variables, along with shared reality, as predictors of prejudice. Consistent with the hypothesis that consensus is a unique contributor predicting prejudicial attitudes, shared reality had statistically significant and large effects on attitudes towards Whites at Step 1, $b = -0.28, SE = 0.04, p < .001$, $\beta = -.45$, for Sample 1, and $b = -0.51, SE = 0.04, p < .001, \beta = -.57$, for Sample 2. More important for our purposes, the effect of shared reality remained both statistically significant and sizable, even while controlling for the other variables, $b = -0.15, SE = 0.04, p < .001, \beta = -.23$, for Sample 1, and $b = -0.17, SE = 0.05, p < .001, \beta = -.19$, for Sample 2.

Mediational Models of Prejudice Towards Whites

Next, we assessed the various intergroup variables’ effects on attitudes towards Whites using models that tested multiple mediation. Multiple mediation tests the indirect effect of a predictor (exogenous) variable on an outcome variable through multiple intervening variables (Hayes, 2013). The main goal was to assess the utility of shared reality as a distal variable that explains prejudicial attitudes towards White Americans. We compared a model derived from shared reality theory to alternative model specifications. The shared reality model posits that perceived shared beliefs are the primary motivator of intergroup attitudes. We hypothesize that perceptions of shared beliefs with Whites will both directly influence prejudicial attitudes, while also indirectly influencing prejudice via the other variables in the model. This can be contrasted with, on the other hand, the differential closeness (based on group identities) model that suggests that relative closeness to the ingroup is the central motivator of these attitudes and perceptions. In addition to the differential closeness model, we tested alternative models that specified each of the other variables as the motivating (i.e. exogenous) predictor of prejudice.

Finally, we tested a model of moderated mediation. This allowed us to assess whether the role of the various

| Table 1. Intercorrelations and descriptive statistics (Sample 1, $N=260$) |
|-----------------|---|---|---|---|---|---|---|
| Measure         | 1. | 2. | 3. | 4. | 5. | $M$ | SD  |
| 1. Prejudice towards Whites | — | — | — | — | — | 3.17 | 0.82 |
| 2. Shared reality | — | — | 3.73 | 1.29 |
| 3. Differential closeness | .50 | — | .45 | 4.63 | 1.03 |
| 4. Interaction with Whites | — | .14 | — | .38 | .42 | 4.50 | 1.57 |
| 5. Group conflict | .40 | — | .29 | .00 | — | 4.98 | 1.37 |
| 6. Perceived discrimination | .50 | — | .28 | .43 | — | 4.34 | 2.14 |

Note: $M$, mean; $SD$, standard deviation.

| Table 2. Intercorrelations and descriptive statistics (Sample 2, $N=330$) |
|-----------------|---|---|---|---|---|---|---|
| Measure         | 1. | 2. | 3. | 4. | 5. | $M$ | SD  |
| 1. Prejudice towards Whites | — | — | — | — | — | 3.44 | 0.88 |
| 2. Shared reality | — | — | — | — | — | 2.75 | 0.98 |
| 3. Differential closeness | .46 | — | .57 | — | — | 4.67 | 1.02 |
| 4. Interaction with Whites | — | .50 | — | .49 | — | 4.96 | 1.07 |
| 5. Group conflict | .52 | — | .48 | .30 | — | 4.52 | 1.44 |
| 6. Perceived discrimination | .53 | — | .50 | .43 | — | 3.94 | 1.22 |

Note: $M$, mean; $SD$, standard deviation.
mediating variables in predicting attitudes towards Whites differed between African Americans, Asian Americans and Latinas/os.

The first model specified shared reality as an exogenous (predictor) variable predicting prejudice towards Whites both directly and indirectly via the four other constructs. Consequently, we could estimate shared reality’s direct effect on attitudes towards Whites, its indirect effect—via the other variables: (1) shared reality; (2) amount of interaction with Whites; (3) group conflict; and (4) perceived discrimination from Whites—as well as shared reality’s total effect through all avenues combined. For the four alternative models, each variable that had been specified as a mediator in the shared reality model was in turn specified as the exogenous variable, while the remaining variables became mediators.

Because the models are not nested, we know of no specific tests that allow one to draw concrete conclusions about the models’ relative merits in explaining the observed data. However, by comparing various indexes of direct effects, indirect effects and total effects of the exogenous variables, we can gain novel insights. Most important for our purposes, the analyses can reveal whether shared reality is a significant factor in determining how groups perceive and evaluate each other.

We used the bootstrapping algorithm for testing multiple mediation, as outlined by Preacher and Hayes (2008; also see Hayes, 2013). Bootstrapping is a technique whereby population parameters can be estimated through resampling data with replacement (in our case, 1000 times) from the same sample. Particularly when testing indirect effects, the sampling distribution of parameter estimates may violate assumptions of normality, and bootstrapping affords protection against such violations (Hayes, 2013). The bootstrapping approach has the advantage of being both statistically powerful and robust to violations of multivariate normality, while not inflating Type I errors (Shrout & Bolger, 2002). The models were tested using the PROCESS macro for SPS that was created and made available by Hayes (2012).

Sample 1
The results of all five of the models, which were tested using Model 4 in Hayes’ (2012, 2013) specifications, indicated that a substantial proportion of prejudice towards Whites was explained by the predictor variables, $R^2 = .44$, $p < .0001$. Thus, the dimensions we identified, taken as a set, were successful at predicting American ethnic minority groups’ attitudes towards White Americans. Figure 1 provides the unstandardized path coefficients for the shared reality mediation model. Note that shared reality predicts all four mediating variables, and it directly predicts prejudice, $c’ = -0.15$, $p = .0001$. Shared reality had a statistically significant total effect (i.e. the combined direct and indirect effects) on prejudice, $c = -0.28$, $p < .0001$ (see the top panel of Table 3).

Examination of the results for the group identities model (with differential closeness as the exogenous variable) reveals that differential closeness with Whites also had a substantial total effect on prejudicial attitudes, $c = 0.40$, $p < .0001$. The other models had exogenous predictors that were successful to varying degrees (Table 3). It is interesting to note that the total effect of interaction with Whites was relatively small, $c = -0.07$, $p < .05$. The direct effects of the exogenous variables

![Diagram](image-url)
Table 3. Total effects and total indirect effects for the models

<table>
<thead>
<tr>
<th>Exogenous Variable</th>
<th>Total effect Coefficient</th>
<th>SE</th>
<th>Total indirect effect Coefficient</th>
<th>SE</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Reality</td>
<td>-0.28**** (0.04)</td>
<td></td>
<td>-1.14 (0.03)</td>
<td>-0.20</td>
<td>-0.08</td>
<td>-0.22</td>
<td></td>
</tr>
<tr>
<td>Differential closeness</td>
<td>0.40**** (0.04)</td>
<td></td>
<td>0.19 (0.04)</td>
<td>0.12</td>
<td>0.27</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Interaction with Whites</td>
<td>-0.07* (0.03)</td>
<td></td>
<td>-1.2 (0.02)</td>
<td>-0.17</td>
<td>-0.07</td>
<td>-0.23</td>
<td></td>
</tr>
<tr>
<td>Group conflict</td>
<td>0.24**** (0.03)</td>
<td></td>
<td>0.13 (0.03)</td>
<td>0.08</td>
<td>0.18</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Perceived discrimination</td>
<td>0.19**** (0.02)</td>
<td></td>
<td>0.08 (0.01)</td>
<td>0.06</td>
<td>0.11</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

Note: SE, standard error; CI, confidence interval.
The results for the total indirect effects are based on bootstrapping models (using 1000 samples). The confidence intervals have a 95% level of confidence and are bias-corrected (Preacher & Hayes, 2008). The effect size is the completely standardised indirect effect (Hayes, 2013; Preacher & Kelley, 2011).

*p < .05
****p < .0001

ranged in magnitude from the largest for differential closeness, $c' = 0.21$, $p < .0001$, to the smallest, which was for interaction with White Americans, $c' = 0.05$, ns. The direct effect of shared reality, $c' = -0.15$, $p < .0001$, was the second largest among the five models.

All of the models exhibited statistically significant indirect effects, as shown by the bias-corrected confidence intervals in Table 3. Differential closeness had the largest indirect effect, coefficient = 0.19, followed by shared reality, coefficient = -0.14. The values of the standardised indirect effect, which is an index of effect size (Hayes, 2013), indicated that all of the models exhibited generally similar degrees of mediation.

In sum, according to the indexes explored here, the differential closeness variable was the most successful at predicting levels of prejudice. That said, shared reality had notable total, direct and indirect effects on prejudice towards White Americans. The data from Sample 1 suggest that shared reality has an influence on prejudicial attitudes, which is comparable in magnitude to these other (more established) constructs.

Sample 2

Compared with the estimates that we observed in Sample 1, the estimates from Sample 2 were almost always larger (as illustrated in the lower panel of Table 3). The predictor variables as a whole explained half of the variance in prejudice towards White Americans, multiple $R^2 = .50$. For the shared reality model (shown in Figure 2), both the total effect ($c' = -0.51$, $p < .0001$) and the indirect effect (coefficient = -0.34) of shared reality were statistically significant. (The model specifying interaction with Whites as exogenous also had highly significant total, indirect and direct effects.)

Unlike what was observed in the data from Sample 1, the effects of shared reality were larger in magnitude than all of the parallel effects seen in the alternative models. Differential closeness had a total effect nearly identical to that observed in Sample 1, $c' = 0.39$, $p < .0001$. However, this was primarily the result of the indirect effect, coefficient = 0.30, rather than the direct effect, $c' = 0.09$, $p < .05$.

In sum, the data suggest that, consistent with our hypotheses, perceptions of shared reality do predict US ethnic minorities’ attitudes towards White Americans. This relationship is partially mediated by variables such as differential closeness, perceived discrimination, perceptions of group conflict and the amount of interaction that participants had with White Americans. We conclude that shared reality is a central but heretofore overlooked factor in intergroup relations. Indeed, based on the data across both samples, the predictive value of agreement is as strong as that of group identities (i.e. the differential closeness variable), which are known to be a crucial factor in intergroup relationships.

Do Differences in Mediation Emerge Among Ethnic Groups?

Finally, we investigated whether the roles that the mediating variables play in predicting prejudicial attitudes towards White Americans differ among African Americans, Asian Americans and Latinas/os. We tested
this by using the PROCESS macro (Hayes, 2012, Model 10) to model moderated mediation in the shared reality models obtained from the two samples. (The results did not differ in any substantive way when we specified the more complex Model 76 [Hayes, 2012].) Moderated mediation is used to ascertain whether mediation differs across the levels of another variable; in this case, it determines whether the mediation patterns described previously are moderated by membership in the ethnic groups we studied. Because this test merely adds main effect and interaction terms to the models already tested previously (at the loss of residual degrees of freedom), one can directly compare the moderated mediation model to the shared reality model tested earlier by using an $R^2$-change test.

In Sample 1, there is some evidence for ethnicity moderating the mediational relationships, $\Delta R^2 = .02$, $F(4, 250) = 2.50, p = .043$. The effect of ethnicity is not large—to wit, Cohen’s $f^2 = .04$ for the addition of the moderation terms (Cohen, 1988)—but the conditional indirect effects listed in Table 4 seem to suggest that Asian Americans have slightly stronger indirect effects than the other two groups. In other words, Asian Americans appear to exhibit effects of shared reality indirectly through other variables to a greater extent than either Latinas/os Americans or African Americans. The estimates for the indirect pathways (i.e. the effect of shared reality on prejudice through each of the other variables) for each of the three groups are shown in Table 4. The largest discrepancy for a given mediator between any two ethnic groups’ coefficients is seen with perceived discrimination in Sample 1: The indirect effect of shared reality through perceived discrimination is larger among Asian Americans ($\text{coef} = -0.07$).

Table 4. Shared reality’s indirect effects on prejudice towards Whites across different ethnic groups

<table>
<thead>
<tr>
<th>Mediator variable</th>
<th>African Americans</th>
<th>Asian Americans</th>
<th>Latina/o Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Effect (SE)</td>
<td>Effect (SE)</td>
<td>Effect (SE)</td>
</tr>
<tr>
<td>Sample 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differential closeness</td>
<td>$-0.06$ (0.02)</td>
<td>$-0.10$ (0.03)</td>
<td>$-0.07$ (0.02)</td>
</tr>
<tr>
<td>Interaction with Whites</td>
<td>$0.02$ (0.01)</td>
<td>$0.03$ (0.02)</td>
<td>$0.02$ (0.01)</td>
</tr>
<tr>
<td>Group conflict</td>
<td>$-0.04$ (0.02)</td>
<td>$-0.04$ (0.02)</td>
<td>$-0.02$ (0.01)</td>
</tr>
<tr>
<td>Perceived discrimination</td>
<td>$-0.02$ (0.02)</td>
<td>$-0.07$ (0.02)</td>
<td>$-0.04$ (0.02)</td>
</tr>
<tr>
<td>Sample 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Differential closeness</td>
<td>$-0.05$ (0.02)</td>
<td>$-0.04$ (0.02)</td>
<td>$-0.05$ (0.03)</td>
</tr>
<tr>
<td>Interaction with Whites</td>
<td>$-0.11$ (0.03)</td>
<td>$-0.08$ (0.03)</td>
<td>$-0.09$ (0.03)</td>
</tr>
<tr>
<td>Group conflict</td>
<td>$-0.11$ (0.03)</td>
<td>$-0.09$ (0.03)</td>
<td>$-0.10$ (0.03)</td>
</tr>
<tr>
<td>Perceived discrimination</td>
<td>$-0.09$ (0.03)</td>
<td>$-0.10$ (0.03)</td>
<td>$-0.07$ (0.02)</td>
</tr>
</tbody>
</table>

Note: SE, standard error
The standard error estimates were obtained from bootstrap procedures.
than among African Americans (coefficient = -0.02). No other pairwise contrast is as large.

In fact, the test of moderated mediation did not reach statistical significance in Sample 2, $\Delta R^2 = .01$, $F(4, 320) = 1.73, p = .14$. As such, we could not replicate the evidence that the indirect effect of shared reality on prejudice differed across the three ethnic sub-populations. Given the small effect in the first sample and the null effect in the second (despite having ample power in Sample 2 to detect an effect as large as that observed among Sample 1), we conclude that the relationships between Whites and each of the three ethnic groups we considered are fundamentally similar, if not identical. These findings provide some initial evidence that it is reasonable for psychologists to focus on the dynamics between Whites and African Americans and that models based on this relationship may generalize to the dynamics between other groups.

**DISCUSSION**

The current research positions shared reality as a useful factor in understanding attitudes not just towards an individual group member (Conley et al., 2010; Sinclair et al., 2006) but also towards groups as a whole. The findings reported here address extant questions about the role that consensus (i.e. shared reality) plays in predicting individuals’ attitudes towards outgroups. The results are clear: across two studies, shared reality consistently and strongly predicts—either directly or indirectly—the degree to which non-White people hold prejudicial responses towards White people. This finding was replicated across two populations of participants, with varied operational definitions of some constructs. Of course, these findings do not imply that factors derived from other theories are unimportant, only that shared reality is an additional factor to be considered when attempting to understand intergroup dynamics.

**Theoretical Implications**

The current research expands upon previous research utilising shared reality theory, which has focused largely on intrapersonal and/or intrapsychic processes (e.g. Echterhoff et al., 2009; Sinclair et al., 2006). Other research has more directly implicated shared reality in the intergroup dynamic but has focused on relationships between individual members of different groups, rather than examining perceptions of individuals at the group level (i.e. ‘what do you think of this White American?’ versus ‘what do you think of White Americans as a group?’). The current research expands shared reality theory by suggesting that it may influence attitudes not only at the interpersonal level (i.e. two individual members who belong to different groups) but also the relationships between groups as a whole (e.g. African Americans’ attitudes towards Whites). Thus, the current research better integrates shared reality processes into traditional paradigms of intergroup dynamics. In sum, although shared reality is explicitly a theory of interpersonal relationships, the current research suggests that shared reality can be applied to abstract group relationships. This finding opens the door for the application of other interpersonal relationship theories to intergroup relationships.

This research represents an attempt to integrate shared reality theory with other prominent theories of intergroup relationships. Researchers have begun to emphasise the importance of problem-focused—as opposed to theoretically driven—research (Schmader & Stone, 2008). We suggest that the field of intergroup relations currently has a great deal of depth research (e.g. understanding precise mechanisms of a particular theory) and relatively less breadth research (e.g. examining interrelationships among a variety of theories and assessing their relative utility). Although both approaches clearly advance the field, addressing the relative utility of a variety of theoretical perspectives would seem to provide the most comprehensive explanation for complex social phenomena. Examining the hypothesized mechanisms of a variety of theories both advances our understanding of the interplay of theories and forwards more outcome-based goals, such as more positive intergroup dynamics.

The current research on intergroup relationships is largely focused on broad group processes, such as group competition or political tensions, consistent with the field’s interest in attitudes that groups hold about each other as a whole. We suggest that incorporating theories of interpersonal relationships can provide a unique perspective on the intergroup dynamic (Echterhoff et al., 2013; Mackie & Smith, 1998). Thus, drawing upon shared reality theory, we take the perspective that dyadic relationships are the building blocks of broader intergroup dynamics: The interactions that members of different groups have with each other exert a strong impact on more global attitudes towards groups. Although this argument is not unique (it figures prominently into the contact hypothesis, for example), we suggest that for the most part intergroup researchers have overlooked the complex interpersonal dynamics of intergroup relationships—the very dynamics that are so central to research on interpersonal relationships. Relatively little research has applied a theory of close interpersonal relationships to the study of intergroup
dynamics (Mackie & Smith, 1998). Given that we demonstrated shared reality theory to be a useful tool for understanding intergroup dynamics in these samples, we have highlighted the utility of using dyadic processes to understand broader intergroup attitudes. Finally, the current research contributes to our understanding of shared reality by showing that the basic mechanisms of shared reality are relevant to intergroup dynamics for a variety of ethnic groups.

Implications and Applications to Actual Intergroup Relationships

The current research locates shared reality as one source of positive or negative attitudes towards White Americans. If we consider this finding representative of a general intergroup process (rather than focusing on the non-White/White dynamic more specifically), it suggests that allowing groups to recognize points of consensus could promote more positive relationships overall. Importantly, previous research suggests that points of consensus need not be particularly consequential to be effective at fostering positive relationships (Conley et al., 2010); thus, it should not be terribly difficult to establish foundations for future agreement.

That said, it seems useful to consider whether amelioration of marginalized groups’ negative attitudes towards the dominant group is wholly positive. Developing a shared reality with a dominant group can increase positive attitudes towards that group. But it could inhibit processes of political action to develop social parity between dominant and marginalized groups. For example, a minority ethnic group member who believes she agrees (i.e. shares reality) with White Americans on some issues may be inclined to construe even prejudicial treatment at the hands of White Americans as benign, (Saguy & Chernyak-Hai, 2012). Indeed, it might well be said that members of lower-power groups should not be burdened to take action to improve intergroup relationships, given their vulnerable status. Thus, while we have elucidated variables that could improve intergroup relationships, we are wary of the social implications of implementing the consequent applications of this approach. When shared reality exists, it predicts more positive attitudes towards White Americans, but whether American ethnic minority groups should therefore strive to have consensus with Whites is a more complicated issue.

CONCLUSION

The current research provides preliminary evidence that shared reality is an important predictor of positive intergroup attitudes, both proximally and distally. In particular, the current research suggests that ethnic minority groups’ sense of shared understanding with Whites may regulate attitudes towards Whites. Future intergroup research should continue to incorporate dyadic processes to develop a more complete understanding of intergroup relationships.

REFERENCES


