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Subliminal exposure to faces and racial attitudes: Exposure to Whites makes Whites like Blacks less ☆

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Abstract

Despite recent social and political advances, most interracial contact is still superficial in nature, and White individuals interact mainly with other Whites. Based on recent mere exposure research, we propose that repeated exposure to Whites may actually increase prejudice. In a series of experiments, White participants were subliminally exposed to White faces or nothing (control) and then completed various explicit and implicit measures of racial attitudes. Exposure to White faces consistently led to more prejudice by making attitudes toward Blacks more negative, rather than by making attitudes toward Whites more positive. A final experiment demonstrated that the pattern of increased prejudice following exposure to Whites was moderated by the strength of participants' attitudes toward Whites. Only when White attitudes were strong did Black attitudes became more negative after exposure to White faces.

Keywords: Mere exposure; Subliminal; Prejudice; Attitudes toward Whites; Attitude strength

In real life, much of the intergroup contact that White people experience barely qualifies as contact at all. In stores, hallways, and classrooms, on buses, sidewalks, and subways, Whites are exposed to various members of outgroups and hardly ever speak to them, much less interact with them. When asked to think about their good friends in a 1998 poll, only 24% of White U.S. respondents reported having a Black friend (Smith, 2002). Most of the interpersonal contact Whites experience in their lives is instead with other Whites. After all, the average White person in the United States lives in an area that is almost 83% White and only 7% Black (Logan, 2001). In short, most White people are primarily exposed to other Whites.

What are the effects of this repeated intragroup contact on Whites' intergroup attitudes? The contact hypothesis holds that simple contact between groups, such as the Black–White contact described above, is insufficient to improve attitudes toward outgroups (e.g., Dovidio, Gaertner, & Kawakami, 2003; Pettigrew & Tropp, 2006), but it is silent regarding the effects of intragroup contact. However, almost four decades of mere exposure research suggest that even interactionless exposures to members of a particular group should improve attitudes toward that group (Bornstein, 1993; Zajonc, 1968). The mere exposure effect thus suggests an unexpected path to increased prejudice: repeated exposure to ingroup members should improve attitudes toward the ingroup, at the relative expense of the outgroup.

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In the present research, we explore how subliminal exposure to White faces affects the attitudes of White individuals toward Whites and Blacks. We focus in particular on prejudice, or negative attitudes toward an outgroup relative to an ingroup, because contact has a stronger effect on affective than on cognitive reactions to outgroups (Tropp & Pettigrew, 2005). Despite changing societal norms, Whites' attitudes toward Blacks remain ambivalent at best (e.g., Gaertner & Dovidio, 1986).

Mere exposure and racial prejudice

The mere exposure effect is one of the most robust findings in social psychology (see Bornstein, 1989, for a review). Just perceiving an object repeatedly—regardless of whether that object is an irregular polygon (e.g., Kunst-Wilson & Zajonc, 1980) or a person (Bornstein, Leone, & Galley, 1987; Moreland & Beach, 1992)—seems to improve a person's attitude toward that object. This effect does not depend on conscious awareness of the stimuli and may even be stronger when the stimuli are presented subliminally (Bornstein & D'Agostino, 1992).

As Bornstein (1993) has suggested, mere exposure is highly relevant for the prejudice problem. However, in over 200 studies of mere exposure, only four investigated how exposure could alter attitudes toward Blacks and Whites (Ball & Cantor, 1974; Cantor, 1972; Hamm, Baum, & Nikels, 1975; Perlman & Oskamp, 1971), and this research has limited ability to address our research question. The studies have a variety of methodological limitations, such as the use of pre-posttest designs that exposed participants to all stimuli at least once, and vague or nonexistent cover stories. They are also open to a wide array of demand effects due to their use of long supraliminal exposure times. Finally, in all these experiments, each participant was exposed to both Black and White faces, rather than just to faces of one race. To investigate the effects of intragroup contact, White participants must only be exposed to Whites.

For mere exposure to be of any importance for understanding prejudice, its effects must also extend beyond the particular stimuli that are presented. Like most prejudice researchers, we are interested in attitudes toward Blacks and Whites in general, not just attitudes toward four or five members of each group. A few mere exposure researchers have looked at generalization of liking to new, related stimuli from the same category (e.g., Gordon & Holyoak, 1983; Kramer & Parkinson, 2005; Rhodes, Halberstadt, & Brajkovich, 2001), finding that the mere exposure effect does seem to generalize within a category. For example, Gordon and Holyoak (1983) exposed participants to letter strings generated by an artificial grammar and found that they preferred new letter strings that also followed this grammar to new, "random" strings. Rhodes et al. (2001) found similar generalization with composite faces that represented averages of previously presented faces. These studies suggest that if stimuli can produce typical mere exposure effects—if repeated exposure to them results in greater liking of them—then this improved attitude should generalize within the particular category. It follows logically that exposure to White faces should lead to greater liking of Whites in general.

Traditional versus generalized mere exposure effects

The notion of within-category generalization makes the mere exposure effect more complex. In essence, there are two kinds of mere exposure effects. The first we will call the *traditional* mere exposure effect, as it is how mere exposure has been classically measured since the original Zajonc (1968) paper. Here participants like old stimuli more than new stimuli from the *same* category. This traditional conceptualization of the mere exposure effect is inextricably bound to the standard design of a mere exposure experiment: Stimuli in previous mere exposure experiment have always been drawn from a single category (Whittlesea & Price, 2001). With such a design, one can only test for the presence or absence of the traditional mere exposure effect. You cannot test for generalization without including other categories of stimuli in the rating phase.

In their second experiment, Monahan, Murphy, and Zajonc (2000) employed just such a design. They exposed some participants to one category of stimuli (Chinese ideographs), others to a different category of stimuli (polygons), and a third group to nothing. Then all participants rated both old and new ideographs and old and new polygons. In other words, participants in the two exposure conditions had to rate old and new stimuli from the category they were exposed to, as well as stimuli from the other, nonexposed category. Under these conditions, participants in the two exposure conditions did not show a traditional mere exposure effect. They liked previously exposed stimuli and new stimuli from the same category equally well. Instead, all stimuli, both old and new, from the exposed category were liked more than stimuli from the other, nonexposed category. Such a result may be seen as a stronger form of the generalization found in the mere exposure research mentioned previously (e.g., Gordon & Holyoak, 1983; Rhodes et al., 2001); in this case no within-category distinctions are made. We will thus refer to such an effect as a *generalized* mere exposure effect. Having participants evaluate stimuli from multiple categories, including nonexposed categories, not only allows one to observe a generalized mere exposure effect, but it also seems to weaken or eliminate a traditional mere exposure effect.

This type of multiple-category design seems well-suited to research on racial attitudes. Attitudes toward ingroups and outgroups are rarely discussed in isolation. Researchers often compare the two, using attitudes toward the ingroup as a benchmark to determine whether attitudes toward an outgroup are positive, negative, or neutral (e.g., Fiske, 1998). There is a long tradition, beginning at least with Allport (1981/1954), of treating relative preferences as prejudicial. Hence, most popular modern