

Racial Contact, Attitude and Decision-making in Cross-race Identification: Implications for Multiracial Societies

Contato Racial, Atitude e Tomada de Decisão
na Identificação de Raças Diferentes da Própria Raça:
Implicações em Sociedades Multirraciais

Contacto Racial, Actitud y Toma de Decisión
en la Identificación de Diferentes Razas entre sí:
Implicaciones para las Sociedades Multirraciales

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Abstract

Different measures of contact had different relationships to discriminability and decisional criteria. Significantly more Blacks mentioned having White Latinos friends than White Latinos mentioned having Black friends. Having friends and “hanging out” with individuals of a different race did not relate to the cognitive capacity to discriminate between faces, but was associated with using a stricter criterion to decide on guilt. Working closely with members of another race did not relate to discriminability or to decisional criterion. Results suggest that same- and cross-race recognition are related to and may depend on the kind of group interaction. This is, in cross-race recognition, the capacity to discriminate between faces is not (necessarily) the best predictor of how decisions are made. Different mechanisms are involved in making a decision, versus simply recognizing a cross-race face, and contact and attitudes likely influence those decisions, having serious implications to multiracial societies.

Keywords

Cross-race eyewitness identification; decision-making; attitudes/prejudice; interracial contact; race relations.

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Resumo

Diferentes medidas de contato apresentaram relações distintas a discernimento e critérios de tomada de decisão. De forma significativa, mais afrodescendentes mencionaram ter amigos latinos brancos do que latinos brancos mencionaram ter amigos afrodescendentes. Ter amigos e sair /passar tempo com indivíduos de raças diferentes não se associava à capacidade cognitiva de discernir os rostos, mas sim com o uso de um critério mais rigoroso de tomada de decisão. Trabalhar de perto com membros de uma outra raça não se associava a discernimento ou a critérios de tomada de decisão. Os resultados sugerem que o reconhecimento dentro da própria raça e fora dela está relacionada ao tipo de interação em grupo e pode depender do mesmo. Assim, no reconhecimento fora da própria raça, a capacidade de discernir os rostos não é (necessariamente) o melhor preditor de como as decisões são tomadas. Mecanismos diferentes estão envolvidos na tomada de decisão, versus reconhecer simplesmente um rosto de outra raça, e o contato e as atitudes provavelmente influenciam estas decisões, com implicações críticas para sociedades multirraciais.

Palavras-chave

Testemunha ocular, identificação, tomada de decisão, atitudes/preconceito, contato interracial; relações raciais.

Resumen

Diferentes medidas de contacto presentaron diferentes relaciones a la distinción y criterios para la toma de decisiones. Significativamente más afro-descendientes mencionaron que tenían amigos latinos blancos que los latinos blancos, quienes mencionaron que tenían amigos negros. Tener amigos y “pasar el tiempo” con los individuos de una raza diferente no estaban relacionados a la capacidad cognitiva para discernir rostros, pero estaban relacionados a un criterio más riguroso para determinar la culpa. Trabajar de cerca con las personas de otra raza no estaba relacionado con la discriminación o con el criterio para la decisión. Los resultados indican que el reconocimiento de la misma raza o diferentes razas está relacionado al tipo de interacción entre grupos y puede depender de lo mismo. Esto es, en el reconocimiento de razas diferentes a la de uno mismo, la capacidad para discernir rostros no es (necesariamente) el mejor indicador de cómo las decisiones son tomadas. Diferentes mecanismos están involucrados en la toma de decisiones. Reconocer simplemente un rostro de otra raza, el contacto y las actitudes probablemente influyen estas decisiones con serias implicaciones para las sociedades multirraciales.

Palabras clave

Identificación con testigo ocular de diferentes razas entre sí; toma de decisiones; actitudes/prejuicio; contacto interracial; relaciones raciales.

Introduction

The contact hypothesis assumes that the amount of cross-race contact and the resulting level of familiarity strongly influence individual facial recognition ability (Brigham, Snyder & Spaulding, 1982; Chance, Goldstein & McBride, 1975; Ng & Lindsay, 1994). Early research on novice versus expert on other race faces indicates that experience promotes expertise (Elliott, Wills & Goldstein, 1973). However, findings on the contact hypothesis seem to be inconsistent. For instance, some studies (Chiroro & Valentine, 1995; Ng & Lindsay, 1994) stated that living among members of another race would reduce the cross-race deficit, while others (e.g. Lavarkis, Buri & Mayzner, 1976) showed that contact with another race can increase the cross-race effect. Allport's (1954) contact theory argued that increased intergroup contact does not necessarily reduce hostility or lead to interracial friendship. Increase in contact may actually reinforce previously held stereotypes and increase intergroup hostility, especially when the environment provides unequal status for minority and majority groups.

In line with this hypothesis, Li, Dunning, and Malpass (1998) demonstrated that White "basketball fans" were superior to White "basketball novices" in recognizing Black faces. Wright, Boyd and Tredoux (2001)'s field study in South Africa and England revealed that in both countries, the perpetrators were better recognized by people of their own-race. Burgess (1997), Malpass and Kravitz (1969), Ng and Lindsay (1994) and Platz and Hosch (1988) did not find the predicted relationship between contact and accuracy in recognizing faces of members from different racial groups. Yet, Slone, Brigham and Meissner (2000) and Sporer (2001) suggest that the amount of contact with other races may not be as crucial as the quality of interracial contact. Therefore, the cross-race deficit does not seem to be due to differential cross-race experience or contact.

Yet, the contact or experience hypothesis is only weakly supported according to many authors (Brighman & Malpass, 1985; Ng & Lindsay, 1994; Li e col., 1998). Khmelkov and Hallinan (1999) showed that the quality of interracial interactions and the resulting relationships among students is directly influenced by the context of different organizational practices, and thus schools can promote positive race relations. Henry and Hardin (2006) focused on implicit measures of prejudice and intergroup contact between Whites and Blacks in the United States and Christians and Muslims in Lebanon. The results show that intergroup contact appears to reduce implicit prejudice among low-status groups. That is, in the United States the implicit prejudice of Blacks toward Whites was reduced as a function of friendly contact; and in Lebanon, the implicit prejudice of Muslims toward Christians also was lower as a function of friendly contact. The expected bidirectional relation between intergroup contact and subsequent positive implicit attitude/prejudice in out-groups did not occur, which reflects the importance of the particular social context in which the attitudes are measured and the particular kind of measure (explicit or implicit) used. However, the focus should be on how intergroup contact in various types of situations might reduce the likelihood of differential face identification. Perhaps not all kinds of contact decrease racial attitude and prejudice, and racial attitude probably plays a role on cross-race identifications.

The Use of Response Criteria and Discriminability/Accuracy Measures

Measures derived from Signal Detection theory were first used by Malpass and Kravitz (1969) in their first study of cross-race face recognition. The method of signal detection theory (SDT) was chosen because it differentiates the hypothesized bias towards or away from *false positive* or “over-guessing” (i.e., decisional criterion) from sensitivity or the ability to discriminate signal (perpetrator) from noise (foils). Nevertheless, response bias (decisional criterion) and accuracy measures together have been shown to have important implications for person identification (e.g., Da Silva 2004; Meissner & Brigham, 2001; Shapiro & Penrod 1986; Slone, et. al., 2000; Sporer, 2001).

In three experiments, Sporer (1992b) found that White German participants used more lax criteria with Black faces than with White faces. Slone et al. (2000) also found that White participants used a less stringent criterion when identifying Black faces than White faces. Also, the study showed that the response criterion changes as a function of gender of the faces; a particularly lax criterion was applied to Black male faces.¹

James Doyle (2001) urged researchers in social and political science to show deeper theoretical interest in issues of decisional bias. He believes in the possibility of preventing errors before they occur by knowing more about the use of relaxed criteria among different race/ethnic backgrounds. Clearly, a decisional criterion rests on *how* decisions are made, which taps more social processes affecting cross-race identifications in diverse societies.

Signal Detection Analysis and its Relation to this Study

The signal detection approach has been rigorously tested and proved to be successful and useful in face discrimination research (McCarthy & Davison, 1981; Kornbrot, 2006). Signal Detection Theory (SDT) (Green & Swets, 1966) is a mathematical model depicting how decisions are made in the face of uncertain evidence. That is, signal detection provides distinct and theoretically independent measures for sensitivity/capacity to discriminate and decisional criteria (strictness of criteria used to decide).²

In *decision-making analysis* there are four kinds of outcomes in any identification: a) the eyewitness successfully identifies the person who committed the crime, termed a *positive hit*. b) The eyewitness may correctly state that the person did not commit the crime, termed a *negative hit*. c) The eyewitness incorrectly identifies an innocent suspect as the perpetrator, which is called a *false positive* error or false alarm. d) The eyewitness incorrectly states that

¹ All discrimination tasks involve decisional criteria. Participants for whatever reason prefer one response type over others, and this may not even be part of a conscious process of discriminating; in this sense, response criterion is nothing but a personal criterion for response. In this study I am mainly interested in how response criteria affect or are related to the participants' capacity to discriminate between own-and cross-race stimuli (faces).

² The measure of sensitivity or recognition performance d' is considered very similar to a non-parametric measure called A' , and other researchers preferred to use A' instead of d' . Both measures offer *hits scores*: saying a face was seen before and when in fact was seen before; and *false alarms scores*: when a person says that the face was seen before when it was not. Both measures, A' and d' provide an estimate of recognition accuracy that is not contaminated by observers' response bias. (Misses and correct rejections are complements of hits and false alarms and are ignored in the analysis). A High d' or A' value is associated with increased recognition.

the *perpetrator* did *not* commit the crime, which is called a *false negative*. Both *false positive* (the eyewitness say “yes, that’s the person who committed the crime”, when in fact he/she did not), and *false negative* (the eyewitness say “no, that’s not the person who committed the crime”, when in fact was) have especially important implications for the legal system.

The use of a decisional analysis to study face recognition helps one to look closely into mechanisms underlying decision-making (e.g., explore perceptual processes, which tap familiarity with members of other races; and social processes, which tap decisional processes reflecting attitudes toward and beliefs about different racial groups). The aim of this study was to investigate cross-race identifications by means of signal detection analysis in order of get separate measures of sensitivity and decisional criteria and relate to racial contact.

One hundred and nine participants saw a seconds video (a Black actor or a White Latino actor) depicting a young man entering a classroom and taking a wallet lying on the center table of a lecture room. After watching the video they were asked to write down what they saw in the scene. Each participant saw 5 trials of 15 photos each (3 photos of the perpetrator, and 12 photos of foils), for a total of 75 photos (Black perpetrator and Black foils or White Latino perpetrator and White Latino foils). Thirty minutes later they were asked to make a decision from among four responses: very sure *it is not* the man in the video; a little bit sure *it is not* the man in the video; a little bit sure *it is* the man in the video, very sure *it is* the man in the video. After the face recognition task participants answered a short questionnaire. The questionnaire included questions about their own racial/ethnic identification level of confidence, positions about false positive and false negative errors, their frequency of contact with own and other racial groups, their degree of friendship with members of other racial/ethnic groups, and their decision-making strategies.

Analysis of Written Responses to the Video

After participants viewed the video, they were asked to describe the event they had witnessed. In general, participants mentioned the *race* of the person in the video significantly more often when the video featured a Black than when the video featured a White Latino. This trend did not differ for cross- and same race conditions or among any other group combination. That is, Blacks mentioned the race of the *perpetrator* when he was Black as frequently as White Latinos did. The overall difference was significant by Chi-square, $\chi^2(1, N = 88) = 14.77, p < .001$. The partition Chi-square results, $\chi^2(1, N = 88) = 13.24, p < .001$, comparing groups confirmed that when participants saw the Black video they mentioned the race of the person more than when they saw the White Latino video independently of who was the viewer. That is, when Blacks and White Latinos watched the Black video they more often mentioned the race of the person than they did when they watched the White Latino video.

Analysis of Mentioned Friendship with Members of Another Race

Racial contact measures were gathered from participants’ responses to the questionnaire. Participants, in general, (i.e., despite the condition or group they were in) mentioned that most of their friends were the same race as themselves. However, significantly more Blacks (44.5%) mentioned having White Latinos as friends than White Latinos (18.6% of all White Latinos) mentioned having Black friends. Mentioning having cross-race friends [White

Latinos mentioning having Black friends and Blacks mentioning having White Latino friends] was not associated with better sensitivity/capacity to discriminate between faces, but was significantly correlated ($r(86) = .223, p < .05$. with a stricter criterion. That means, in general, participants who mentioned having cross-race friends used a stricter decisional criterion to decide on the face recognition task.

Analysis of Mentioned “Hanging out” with Members of Another Race

White Latino and Black participants’ reports of “hanging out” with members of another racial group were also examined. Seventy-three percent of Black participants mentioned often hanging out with White Latinos, while only thirty five percent of White Latinos reported often hanging out with Blacks. The difference was significant by Chi-square, $\chi^2(1, N = 88) = 7.10, p < .01$.

Analysis of Hanging out and Having Cross Race Friends Combined (Friendship)

Neither the friendship contact measure nor hanging out contact measures was related to sensitivity/capacity to discriminate. They were, however, related to decisional criteria. The two contact measures were combined into a new measure of contact called Friendship. The variables were recoded into (0) = Low cross-race contact (almost never hanging out with members of another race, and having no cross-race friends), (1) = Some cross-race contact (either hanging out with members of another race, often or very often, or having cross-race friends), and (2) = High cross-race contact (hanging out with members of another race often and very often and having cross-race friends).

The results showed that reported friendship did not predict sensitivity/capacity to discriminate between the perpetrators and foils, but was related to decisional criteria in both cross-race conditions. When the cross-race conditions (Black identifying White Latinos and White Latinos identifying Blacks) were combined and examined as a function of cross-race contact, participants who were in the cross-race conditions and mentioned having cross-race friends and hanging out with members of another race used a stricter criterion to decide on the face recognition task than did those with low race contact.

Analysis of Mentioned Working with Members of Another Race

White Latino and Black participants’ responses to cross-race contact with Blacks and White Latinos through work were also examined. No significant relationship was found between reported frequency of work contact and capacity to discriminate/capacity to discriminate or with decisional criterion, as hanging out and having cross-race friends did.

Discussion and Conclusion

The current study supports research suggesting that mere contact may not be sufficient to eliminate the cross-race recognition effect (Burgess, 1997; Malpass & Kravitz, 1969; Ng &

Lindsay, 1994; Platz & Hosch, 1988). Therefore, the cross-race deficit does not seem to be due to differential cross-race experience or contact.

This study shows that having cross-race friends and hanging out with members of another race did not have a general relationship to sensitivity/discriminability, but did relate to decisional criterion. Those who mentioned both kinds of contact used a stricter criterion to decide on guilt, but only in the cross-race conditions. Thus, it appears that frequency of more personal (not work-specific) interaction with members of another race among individuals influences the readiness to declare some one of another race guilty.

It appears that frequency of interaction with members of another race among individuals is influenced by the specific context of the interaction settings (and how those may or may not promote cross-race interactions). This study shows that having cross-race friends as well as hanging out with members of another race did not necessarily increase discriminability (capacity to discriminate between faces), but was related to criterion placement. As Allport suggested, contact may increase or decrease prejudice, which may affect one's decisional criterion. Also, the amount and kind of inter-group personal contact and resulting friendship are believed to be keystones in the reduction of prejudice (Aboud e col., 2003).³

Findings suggest that just having contact at *work* with members of another race most probably indicates a different kind of interracial interaction than friendship, because individuals may have no choice in interacting with members of other races in work settings. These findings show that some, but not all kinds of contact are related to decisional criteria. This suggests that, in cross-race recognition, the capacity to discriminate between faces is not (necessarily) the best predictor of how decisions are made. Different mechanisms are involved in making a decision, versus simply recognizing a cross-race face, and contact and attitudes likely influence those decisions.

Cross-race personal relationships are increasing as we move towards a more multi-ethnic and multicultural era, this study not only demonstrates the usefulness of a signal detection analysis of eyewitness performance across White Latinos and Blacks racial groups, but also points to implications for the legal system in modern societies. However, the cross-race effect should not be presented to the legal system as a singular and general problem, what does happen is probably a more complex phenomenon depending on the particularity of *eyewitness-perpetrator'* combination, whereby other variables such as *context* (e.g., the context in which relations take place, and how those promote or not interracial relationships) and individuals' beliefs and constructed meanings of interracial relationships need to be carefully considered.

Having cross-race friends, and hanging out with members of another race were found to have a positive relationship with decisional criterion (stricter criteria to decide on guilt). This highlights the importance of investigating different kinds of contact with other races, how those happen, and the degree to which of cross-race/ethnic interactions diminish segregation, particular in schools, and encourage institutions to promote interracial relations that may lead to better decisional criteria placement and awareness about false positive errors.

³ Cross-race friendships became an important tool for the reduction of segregation and prejudice in elementary schools. Aboud e col., (2003) examined same and cross-race peer relations as a function of grade, gender, and race; as well as, the relationship between peer relations and racial attitudes. Cross-race mutual friendships decline with grade (as children get older). Children with less biased attitudes had more cross-race interactive companions, and more positive perceptions of their friends.

Future Research

There are many avenues where this line of study could be extended and applied. Two distinct lines of research are suggested by these findings. First, continuing the investigation of how different kinds of contact with individuals of a different race relate to decisional criteria across different contexts, by using findings about the effects of racial context on racial attitudes (e.g., race relations and racial threat among diverse societies). Second, to investigate how the severity of the crime is related to the outcomes of making cross-race identifications. For example, when making identification a witness may be aware of the potential repercussions of their correct or incorrect selection, affecting the criterion applied as well as discriminability, this is, while White Latinos may use a progressively lax criterion as the severity of the crime increases for a suspect of an out group ethnicity; they may use an increasingly strict criterion as the severity of the crime increases for a suspect of the same ethnicity. A finding such as this could be argued to be the result of competing increasing desires to err of the side of punishing the guilty or freeing the innocent, as the severity of the crime increases, yet outcomes may change across different contexts.

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