

---

# AMERICAN JOURNAL OF PSYCHOLOGICAL RESEARCH

---

Volume 3, Number 1  
Submitted: December 7, 2006  
Accepted: January 3, 2007  
Publication Date: January 15, 2007

## **The Use of Race in Social Categorization**

Beth Hentges, University of Houston-Clear Lake

Cynthia Campbell, Loyola University

Contact: Beth Hentges  
University of Houston-Clear Lake  
2700 Bay Area Blvd, Box 157  
Houston, TX 77058  
281-283-3308  
[hentges@uhcl.edu](mailto:hentges@uhcl.edu)

### **ABSTRACT**

*To examine individuals' willingness to use race as a social category 91 participants, recruited from a large urban university, completed a task using children's dolls, where they were asked to select a doll that differed from the others and then to explain their choice. The dolls varied on race, gender, and hair color/length. Overall participants used gender and hair color/length more often than race to verbally categorize the dolls. Participants varied in the use of race in categorizing the dolls, with a subset of participants avoiding using race almost entirely.*

### **INTRODUCTION**

Social categorization is a normal human process (Hewstone, Hantzi, & Johnston, 1991); individuals place people into categories on the basis of perceptually relevant dimensions such as gender, age, race, and weight. "To negotiate the intricacies of everyday interaction, perceivers require information-processing routines that simplify the complexities of the person perception process. The mind's evolved solution to this problem would appear to be to assign individuals to meaningful (and distinct) social groups through a process of person categorization" (Quinn &

McCrae, 2006, p. 476). Of the many possible categories, race is a particularly salient category for many individuals (Hewstone et al., 1991; Park & Rothbart, 1982). While race may not be the most salient dimension for all individuals, research generally indicates that gender and race are the most used perceptual features in social categorization (Hewstone et al., 1991; Stangor, Lynch, Duan, & Glass, 1992; Van Twuyver & Van Knippenberg, 1995). Hewstone et al. (1991) argue that basic categories such as race are usually accessed when people categorize others. When we encounter a person we automatically notice their race and assign them to perceived social category.

Although race is a socially relevant dimension, racial prejudice is socially unacceptable in modern society (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002). Along with decreasing acceptance of racial prejudice have come increasing calls for a racially-blind, or color-blind society. The idea is that race does not matter, and should not be considered, or even perceived (Richeson & Nussbaum, 2004). While at some levels this makes intuitive sense, evidence indicates that individuals who endorse a color-blind ideology may show higher, not lower levels of explicit and implicit bias (Neville, Lilly, Lee, Duran, & Browne, 2000; Richeson & Nussbaum, 2004; Wolsko et al., 2000). However, equating racial consciousness with racial bias has potentially negative implications. To deny a person's racial minority status, is to deny the very real possibility of their experiencing discrimination.

Since research indicates that race is perceptually relevant in social categorization (Hewstone et al., 1991; Park & Rothbart, 1982) noticing race may be inevitable. Thus, even people who want to be "color-blind" may fail to achieve this goal. If, as research indicates, individuals who endorse a color-blind ideology are higher in implicit and explicit racial bias, it would seem that at some level race is still perceived. However, if a person is invested in a "color-blind" ideology they might deny noticing race even as they place someone in a racial category. To suppress racial stereotypes an individual must first categorize by race (Quinn & McCrae, 2006). However, among people endorsing a color-blind ideology the simple act of categorizing by race might be construed as racially biased. If an individual believes racial categorization is equivalent to racial bias they might: 1) be less likely to use race as a social category, or 2) categorize by race but provide alternative explanations for their categorization.

We need a way to examine categorization separately from the expression of categorization. We designed the present study to explore a possible methodology for separating the use of race in social categorization from the verbal acknowledgement of racial categorization. Specifically we were interested in: 1) whether individuals would differ in the frequency with which they used race to categorize others, and 2) whether individuals would willingly state when they used race as a basis for categorization.

## **METHOD**

### *Participants*

We recruited 91 (71 female, 19 male, 1 unknown) participants from a participant pool in a General Psychology class at a non-traditional University in a major metropolitan city. Sixty-seven self-identified as white, 8 as black, 9 Hispanic, 3 bi-racial or multi-racial, and 4 as human.

Participants ranged in age from 20-50 with an average age of 29.6. Gender, race and age were unrelated to any of the variables of interest so they were not used in subsequent analyses.

### *Design*

To examine the use of race in social categorization we used racially diverse dolls (European American, African American, Asian American, and Latino). The dolls also differed on a number of other dimensions, with the dimensions of race, sex, and hair purposefully manipulated. We created 20 groupings of dolls for participants to compare/differentiate. For each comparison we were interested in which doll the participant picked as being different and their verbal explanation for their choice. Each grouping consisted of 3 dolls. In each of the groupings, two of the dimensions (race, sex, or hair) were controlled with at least 2 dolls varying on one dimension. For example, one grouping had an African-American male, an African-American female, and an Asian-American female. For this grouping participants could pick the African-American male because of gender or the Asian-American female because of race. There were 20 comparisons total, in 10 race and sex were the controlled dimensions, in 6 race and hair, and in 4 sex and hair.

### *Procedure*

We tested each of the participants individually. The examiner placed 3 dolls in front of the participant and said "Which one is the most different?" After the participant selected a doll the examiner then asked "Why is that one different?" If the participant hesitated in selecting only one doll they were told to pick the one that was most different. The participant's choice and explanation were both recorded. If they selected more than one doll or gave more than one explanation, we coded only their first response.

We coded the participant's choice of doll on each of the 20 comparisons based on our classification of the doll's difference. For example if the comparison involved an African-American female, an African-American male, and a Caucasian female, and the participant selected the Caucasian female as the most different, we coded their choice as race. We did this even if their verbal explanation for the selection was different.

The verbal explanations were coded separately. In explaining their choices participants could use any criterion, even those we did not manipulate. For example some participants used eye color as an explanation for their choice. Explanations were coded as race, sex, hair, or other.

## **RESULTS**

For each of the three social categories of interest (race, gender, and hair) we calculated the percentage of times the participant chose a doll different on that dimension (Choice) and the percentage of times the participant used that dimension as the explanation for their choice (Explain) by taking the total number on that dimension across all 20 comparisons and dividing it by the number of comparisons on which that dimension was purposefully manipulated. Participants sometimes used hair as an explanation even when it was not intentionally manipulated. For example, sometimes a participant would say a doll was different because she

had a darker streak in her hair, even though the overall hair color was the same. So, the percentage of times hair was used as an explanation could be more than 100%. The mean percentages are presented in Table 1.

**Table 1. Descriptive Statistics for percent of times participants chose and explained the choice of a doll (N=91).**

	Mean	Standard Deviation	Minimum	Maximum
Race Choice	.50	.18	.13	.94
Gender Choice	.64	.22	.07	1.00
Hair Choice	.24	.16	.00	.60
Race Explain	.30	.19	.00	.75
Gender Explain	.55	.28	.00	1.00
Hair Explain	.41	.34	.00	1.50

To examine the relative salience of each of these dimensions we performed Paired Samples *t*-tests. Dolls different on sex were chosen significantly more frequently than dolls differing on race,  $t(1, 90) = 6.82, p < .01$  or hair,  $t(1, 90) = 11.55, p < .01$ ; dolls differing on race were picked significantly more often than dolls differing on hair,  $t(1, 90) = 8.50, p < .01$ . Participants' explanations for their choice showed a similar pattern, with the exception that participants used hair as an explanation for their choice frequently even when it was not a manipulated dimension. Overall gender was used as an explanation for the selection more frequently than hair,  $t(1, 90) = 2.40, p = .019$  or race,  $t(1, 90) = 6.82, p < .01$ , and hair was used more frequently than race,  $t(1, 90) = 2.32, p = .02$ .

In order to examine individual response patterns, we separated the participants into 3 groups on the basis of the percentage of times they chose a racially different doll. Since each of the comparisons involved 3 dolls, by chance alone participants should have selected a racially different doll at least 33% of the time. Using this criterion I placed all participants who chose a racially different doll less than 33% of the time in Group 1 (N=23), those who chose a racially different doll 33-65% of the time in Group 2 (N=53), and those who chose a racially different

doll 66-100% of the time in Group 3 (N=17). The means and SD for all dependent measures are presented in Table 2.

**Table 2. Percentage of Times Participants Chose and Explained the Choice of Dolls by Race, Gender, and Hair.**

Group	Race Choice		Gender Choice		Hair Choice		Race Explain		Gender Explain		Hair Explain		Adjust Race Explain	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1 (n=23)	.26	.07	.71	.29	.33	.13	.10	.12	.59	.35	.51	.42	.22	.27
2 (n=53)	.52	.08	.65	.20	.24	.17	.30	.13	.56	.27	.40	.32	.47	.26
3 (n=17)	.76	.09	.54	.16	.13	.12	.55	.12	.48	.21	.29	.27	.63	.16

We performed a series of ANOVAs to examine whether the 3 groups differed in how frequently they chose dolls based on race, gender, and hair and how often they explained their choice by race, gender, and hair. Given that the groups were created it is not surprising that they differed significantly on how often they chose racially different dolls,  $F(2,88) = 209.9, p < .01$ , with group 1 differing from group 2,  $p < .01$ , and group 2 differing from group 3,  $p < .01$ . They also differed significantly on how often they chose dolls differing in hair color or length,  $F(2,88) = 8.65, p < .01$ , with group 1 differing from group 2,  $p < .01$ , and group 2 differing from group 3,  $p = .02$ . There was a trend for differing on choosing a doll differing in gender,  $F(2, 88) = 2.91, p = .06$ . In explaining their choices the groups only differed in using race as an explanation,  $F(2,88) = 62.47, p < .01$ , with group 1 differing from group 2,  $p < .01$  and group 2 differing from group 3,  $p < .01$ . There were no significant differences in explaining choices by using hair or gender.

We calculated the percentage of times the participants explained their choice on the basis of race or skin color when they chose a racially different doll (Adjusted Race Explain) and performed an ANOVA using group as the predictor. There was an overall group difference,  $F(2, 88) = 14.77, p < .01$ . Post-hoc comparisons indicated that group 1 ( $M = .22, SD = .27$ ) was less likely to explain their choice by referring to race or skin color, even when they chose a racially different doll, than group 2 ( $M = .47, SD = .26$ ),  $p < .01$  or group 3 ( $M = .63, SD = .27$ ),  $p < .01$ , and group 2 was less likely to explain their choice by referring to race or skin color than group 3,  $p = .03$ .

## DISCUSSION

While on average participants selected a racially different doll 50% of the time, they only used race as an explanation for their choice 30% of the time. While the majority of the participants (77%) selected a racially different doll at levels greater than chance alone, explicit references to race as the basis of selection was relatively low (30%).

The results support individual variations in “color-blindness” in social categorization. While it is possible that some of the differences were due to differences in racial salience, several pieces of evidence suggest that in fact some of the participants were avoiding using race. First, frequently when participants chose a racially different doll they explained their choice in some other way such as hair length or color. This was particularly true for the participants who chose racially different dolls less than 33% of the time.

A final piece of evidence comes from the participants reactions to the task. Several participants expressed discomfort about the task. During our research, we often came across an interesting situation in which participants acknowledged that they saw race as a defining category, however, they refused to use it. Several others expressed discomfort using race as a defining category and even indicated that they felt that they may be viewed as racist for doing so. While there are some clear demand characteristics at work it is interesting that some participants assumed that acknowledging a doll's race might be construed as racist.

### *Limitations and Conclusions*

Although the participants in this study attended a non-traditional university and were therefore older on average than traditional college students, it is possible that they do not reflect a community sample. Being in a college setting might have increased students' awareness of prejudice thus increasing attempts to be “color-blind”. However, since one goal of the present study was to examine the avoidance of race in social categorization this is probably not a major liability. Another potential limitation is the use of dolls as stimuli. Classifying dolls is probably different than categorizing people. However, there is a tradition of utilizing dolls as stimuli in developmental research (for review see Aboud & Skerry, 1984) which was replicated in the present study in order to decrease the effects of social desirability.

The findings of the present study suggest that at least some individuals actively avoid using race in categorizing others. While it seems probable that these same individuals would score low on explicit measures of bias, it is unclear how they would perform on implicit

measures of racial bias. Hopefully future research will examine how individual variations in attempts to be personally “color-blind” relate to individual differences in explicit and implicit prejudice. This could inform broader societal discussions on the impact of color-blind ideologies.

## REFERENCES

- Aboud, F. E., & Skerry, S. E. (1984). The development of ethnic attitudes: A critical review. *Journal of Cross-Cultural Psychology, 15*(1), 3-34.
- Devine, P. G., Plant, E. A., Amodio, D. M., Harmon-Jones, E., & Vance, S. L. (2002). The regulation of explicit and implicit racial bias: The role of motivation to respond without prejudice. *Journal of Personality and Social Psychology, 82*(5), 835-848.
- Dovidio, J. F., ten Vergert, M., Stewart, T. L., Gaertner, S. L., Johnson, J. D., Esses, V. M., Riek, B. M., & Pearson, A. R. (2004). Perspective and prejudice: Antecedents and mediating mechanisms. *Personality and Social Psychology Bulletin, 30*(12), 1537-1549.
- Gaertner, S. L., & Dovidio, J. F. (2005). Understanding and addressing contemporary racism: From aversive racism to the common ingroup identity model. *Journal of Social Issues, 61*(3), 615-639.
- Hewstone, M., Hantzi, A., & Johnston, L. (1991). Social categorization and person memory: The pervasiveness of race as an organizing principle. *European Journal of Social Psychology, 21*, 517-528.
- Quinn, K. A., & Macrae, C. N. (2005). Categorizing others: The dynamics of person construal. *Journal of Personality and Social Psychology, 88*, 467-479.
- Miller, N., Brewer, M. B., & Edwards, K. (1985). Cooperative interaction in desegregated settings: A laboratory analogue. *Journal of Social Issues, 41*, 63-79.
- Monteith, M. J., Voils, C. I., & Ashburn-Nardo, L. (2001). Taking a look underground: Detecting, interpreting, and reacting to implicit racial biases. *Social Cognition, 19*, 395-417.
- Neville, H. A., Lilly, R. L., Lee, R. M., Duran, G., & Browne, L. (2000). Construction and initial validation of the Color-Blind Racial Attitudes Scale (CoBRAS). *Journal of Counseling Psychology, 47*, 59-70.
- Park, B., & Rothbart, M. (1982). Perception of out-group homogeneity and levels of social categorization: Memory of the subordinate attributes of in-group and out-group members. *Journal of Personality and Social Psychology, 42*, 1051-1068.
- Richeson, J. A., & Nussbaum, R. J. (2004). The impact of multiculturalism versus color-blindness on racial bias. *Journal of Experimental Social Psychology, 40*, 417-423.
- Stangor, C., Lynch, L., Duan, C., & Glass, B. (1992). Categorization of individuals on the basis of multiple social features. *Journal of Personality and Social Psychology, 62*, 207-218.
- Van Twuyver, M., & Van Knippenberg, A. (1995). Social categorization as a function of priming. *European Journal of Social Psychology, 25*, 697-701.
- Wolsko, C., Park, B., Judd, C. M., & Wittenbrink, B. (2000). Framing interethnic ideology: Effects of multicultural and color-blind perspectives on judgments of groups and individuals. *Journal of Personality and Social Psychology, 78*, 635-654.