



126
536
THS



This is to certify that the

thesis entitled

The effect of group identity on intergroup
perception— a study in a black-white
Context.

presented by

Wei Chen

has been accepted towards fulfillment
of the requirements for

Master's degree in Department of Sociology
and Urban Affairs Programs.

Stan Kaplowitz
Major professor

Date 15/11/1991

LIBRARY
Michigan State
University

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.

DATE DUE	DATE DUE	DATE DUE
SEP 26 1974		
SEP 25 1974		
SEP 25 1974		

MSU is An Affirmative Action/Equal Opportunity Institution

c:\circ\datedue.pm3-p.1

**THE EFFECT OF GROUP IDENTITY ON INTERGROUP PERCEPTION
--A STUDY IN A BLACK-WHITE CONTEXT**

By

Wei Chen

A THESIS

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

MASTER OF ART

**Department of Sociology
&
Urban Affairs Programs**

1991

680-5486

ABSTRACT

THE EFFECT OF GROUP IDENTITY ON INTERGROUP PERCEPTION --A STUDY IN A BLACK-WHITE CONTEXT

By

Wei Chen

A study using the data from a telephone survey to test the hypothesis that the fact that people identify themselves as blacks or whites could cause them to perceive the information, which is relevant to black-white relation, in a way to favor their own group and disfavor outgroup. Specifically, given the certain characters of contemporary American society for black-white relation, comparing to the perception of white respondents, black respondents would tend to perceive greater socioeconomic inequality and smaller differences for the situation of socially undesirable behaviors between blacks and whites. The respondents were asked to estimate the situations of socioeconomic rewards and socially undesirable behavior regarding both blacks and whites without giving them heuristic information. The results clearly support the first hypothesis and the second one is generally supported as well.

TO MY DAUGHTER YAO YAO, WHOM I HAVE NOT SEEN SO FAR.

ACKNOWLEDGMENT

In every stage to develop this paper, I owe a great deal to my major advisor, Dr. Stan Kaplowitz. His sincere help went through all the way from initial research idea to final draft. He generously allowed me to use the data he collected and provided me many valuable suggestions which ranged from the application of statistical techniques to theoretical explanations of research findings. At the final stage of this paper, he showed awesome patience to correct the mistakes of my English. Without his help, there would not be this thesis. Here, I would like to express my thanks to Dr. Stan Kaplowitz with all my heart. I really learned awful lot from him. That will benefit me all my life.

I would like to thank Dr. John Schweltzer. From our many formal and informal discussions, I gained a lot of benefits which were proved very important to this thesis. He also spent a great deal of time to read my drafts and gave me many insights.

Dr. Clifford Broman provided me with much valuable and constructive advice which were very useful to improving the quality of this thesis. I am very grateful for his help.

Finally, I would like to thank all my friends who gave me sincere support. Wish them happy, successful and healthy.

Table of contents

1) List of tables	vi
2) Introduction	1
3) Method	18
4) Results	21
5) Conclusion	35
6) Appendix A.	39
7) Appendix B.	40
8) Appendix C.	43
9) Appendix D.	45
10) References	47

List of Tables

Table 1. Demographic characters of the respondents	20
Table 2. Summary of perceived and actual differences	23
Table 3. Summary of oneway analysis on difference variables	27
Table 4. Summary of the means of the perception regarding rsonal characters	32
Table 5. Summary of the analysis on attitudes scales	33
Table 6. Correlation of ratio variables to attitude scales	41
Table 7. Correlation of difference variables to attitude scales	41
Table 8. Summary of multiple regression analysis on ratio and difference variables	42
Table 9. Skewness of raw and transformed variables	43

Introduction

For most people in human society, at most time of their lives, they consciously or unconsciously live as members of one or several groups. Their thinking, feelings, behaviors, and most of their physical and mental activities manifest that the group has crucial influences in determining social activities. Moreover, the influence could become substantially powerful in intergroup situations where group identity is salient. What happened in such situations are often hard to explain from the motivations, intentions, affections, cognitions of particular individuals themselves without taking account of the influence of group. Certain kinds of groups, which people are associated with, can dramatically change the way by which people express their behaviors, attitudes, affections, and so forth. As a matter of fact, intergroup behavior and related psychological mechanisms have long been of the interest of researchers in various academic fields.

In contemporary American society, the black-white relationship is a central theme of many social activities. It is interesting to know, as the members of different ethnic groups, how their awareness of being blacks or whites could possibly affect their intergroup behavior or other psychological functions in black-white relation. The purpose of this study is to explore the effect of such a racial identity on black and white people's intergroup perceptions regarding the information which is relevant to black-white relation.

Previous research on the effect of group identity.

There are various perspectives in studying intergroup phenomena. However, in essence, from the perspective of social psychology, the approach to study intergroup phenomena is:

"based on the philosophy of phenomenology, which maintains that we develop our picture of the world through our senses and that our subjective experiences thereby provides the reality out of which, we operate. Thus the perceptions, cognitions, attitudes, and values held by individual actors in intergroup conflict are seen as important influences on their behavior in relation to other party and the conflict" (Fisher, 1990, p.6).

Following this logic, the crucial point here, therefore, is that what people's intergroup activities are directed towards and based on are their subjective experiences, their images of the real world, but not the real world itself. In such a meaning, the subjective perceptions regarding the information which is related to particular groups play an important role in people's intergroup behaviors and relevant psychological functions. The knowledge about people's perceptions regarding group-relevant information and the mechanism of their perceptions could provide a cognitive base in studying intergroup phenomena. That is what this study will focus on.

In my opinion, intergroup perception refers to the perception

by an individual, who is aware of his belonging to a group which has certain relations to other groups in the society, regarding the objective information of his own group or other groups. We define a group, analogous to Emerson's (1960) definition of a nation, as a body of people who feel that they are a group. In Tajfel's view (1981), such a description of group may include the following components: a) a cognitive component, in the sense of the knowledge that one belongs to a group, b) an evaluative one, in the sense that the notion of the group and /or of one's membership of it may have a positive or a negative value connotation, and c) an emotional component in the sense that the cognitive and evaluative aspects of the group and one's membership of it may be accompanied by emotions directed towards one's own group and other groups which stand in certain relations to the former.

Like other perceptions, there are several factors which could influence intergroup perception, such as group size, group status, group identity, individual's emotional situation and so on. This study mainly focuses on the effect of group identity on intergroup perception. That is how people's awareness of belonging to a group could influence the way by which they perceive the objective information regarding their own group and other groups which are relevant to their own.

Tajfel and his colleagues (Billig & Tajfel, 1973; Tajfel, 1970; Tajfel, Flament, Billig & Bundy, 1971) carried out a series of laboratory studies about the effect of people's awareness of

belonging to a group on their allocation behavior in intergroup situations. They found that the mere awareness of belonging to a particular group could significantly affect intergroup behavior. People showed a clear tendency to favor their own group at the expense of out-group. In their studies, the subjects would allocate more reward to the members of their own group than to outgroup members.

The results of their studies also showed that neither the calculations of individual interest, nor the previously existing attitudes of hostility (Tajfel, Flament, Billig & Bundy, 1971), nor the similarity of group members to each other (Billig & Tajfel, 1973) were necessary for the bias intergroup behavior. These findings suggested that in an intergroup situation, people's mere awareness of belonging to one group was sufficient to induce their biased behaviors than would be commonly thought.

There is massive evidence to support the proposition that group identity has a crucial effect in intergroup relations and that the direction of the effect is towards favoring one's own group. In the evaluation of the products made by own and out-group members, the subjects would tend to rate the products of their own group as superior to that of outgroup even though they were not personally involved in production (Brown, Schmidt & Collins, 1988); one's own group is often evaluated as more positive and more socially desirable by its members (Platow, McClintock & Liebrand, 1990); in the situation of intergroup competition, group members show a strong tendency to overestimate

the achievement of their own group (Sherif, 1961; Blake & Mouton, 1961), group member would tend to perceive their own group to be true and correct, and the out group to be false and wrong (Bartal & Geva, 1986).

Specifically, in the respect of intergroup perception, Schaller's (1991) findings from his study on intergroup perception shows that the subjects can have an erroneous perception of the correlation between group and behavior. However, the expression of erroneous perception was varied with the group status of subjects. In his study, the subjects were initially assigned to be members of a minority group, a majority group, or were not assigned to a group. When the subjects were not affiliated with particular groups, they tended to perceive a stronger correlation between distinctive information. In this case, they linked the members of minority group with socially undesired behavior since both had the nature of distinctiveness. But when the subjects were affiliated with one of the groups, there is an important change in their perception. They showed a clear tendency to favor their own group, by associating their own group with socially desired behavior, and associating the outgroup with socially undesired behavior. His findings suggest that the mere awareness of being a group member has a crucial effect on people's intergroup perception.

Kelly (1990) did a study on the effect of group identity on intergroup perception in a political context. The two groups being studied had different opinions on the same issues. Her

findings suggested that the respondents tended to perceive the opinions of outgroup members in a differential way. That is the respondents from one group tended to perceive the opinions of another group members more extreme on a scale of left-right wing than the self-reported opinions of the members of that group themselves. On the other hand, the respondents showed significant tendency of favoring own group by rating the personal characters of their own group members more positively.

In conclusion, we may confidently say that the group identity has a significant influence on people's behavior and other psychological functions in intergroup situations. The direction of this influence is towards favoring own group at the expense of outgroup. In the respect of intergroup perception, this tendency might be manifested such that the members of one's own group are perceived to be right, or have more socially desirable characters, or have more achievement than outgroup members, and so forth.

However, for a study which was carried out in a natural setting rather than in a laboratory, the actual meanings of favoring own group and disfavoring outgroup have stronger cultural connotation. It is closely related to the actual circumstance in which intergroup behavior and other psychological functions happen. Historical legacy and contemporary circumstances are powerful forces which limit the number of alternatives of people's psychological activities in a specific society. It is necessary to have an overall understanding about

the characters of research context in order to establish reasonable hypotheses about intergroup perception in this study.

The analysis of black-white relation in contemporary America.

The specific groups being studied here are black and white people in the United States. Race is a relatively salient group identity in contemporary America. The black-white relation matters in the lives of most American people. Many social activities in the United States are developed around this central theme.

Following the research evidence shown above, I would guess that the effect of race on intergroup perception might manifest in favoring one's own group and disfavoring the outgroup. However, it is necessary to answer an important question before this hypothesis can be illustrated in detail. The question is, what is the crucial factors which characterize the social context of contemporary America for black-white relation? Furthermore, given the situation of contemporary America, what is the specific way by which the perceptions of different group members regarding the information about their own group and outgroup could lead to the benefit of own group at the expense of outgroup?

Before early 60s, the traditional racism was pervasive among white people across the United States. Many white people believed in the innate inferiority of black people, overtly supported the discrimination against black people and denied the right of black to equal opportunity (Hyman & Sheatsley, 1964).

The situation rapidly changed after early 60s. The civil rights movement, Kennedy and Johnson administration's efforts, court intervention, together with other factors, ended the legal racial discrimination in the United States. The traditional racism became socially undesirable in contemporary America (McConahay, 1986). Theoretically, white people would admit that black people have the same right as whites to access opportunities in the society. In 1942, approximately 60% of whites believed that blacks were less intelligent than whites (Hyman & Sheatsley, 1956). By 1964, this figure declined to less than 25% (Hyman & Sheatsley, 1964). A substantial majority of white Americans in 1942 approved of the blatantly discriminatory proposition that "white people should have the first chance at any kind of job," whereas in 1972 nearly 100% of whites in a national survey rejected the statement (Bobo, 1988).

However, as many researchers pointed out, what characterizes the contemporary whites attitudes toward blacks is the paradox that they are positive in admitting the principle of racial equality and negative in supporting the policies designed to provide black people more opportunities to improve their current situations (Bobo 1988; Jackman & Muha 1984; Pettigrew 1985; Schuman and Bobo 1988; Kluegel 1991). Data from various survey researches shows that since early 60s, there is a remarkable positive trend on white people's responses to the questions which are mainly concerned about broader principles (Schuman, Steeh & Bobo 1988). However, their attitudes toward the governmental policies to improve the situation of black people, such as

busing, affirmative action, housing desegregation, welfare, are much more negative. It is a well known historical fact that the liberal northern whites fiercely resisted busing and housing integration. The survey data provided statistical evidences that there is only very trivial or no positive trends of white's attitudes toward implementation (Kluegel, 1990; Shuman, Steeh & Bobo, 1988).

The theoretical explanations of contemporary whites' attitudes towards blacks have two major approaches: symbolic racism and group conflict. The former focused on the value system and racial affection of white people. Sears (1988) believes that the paradox of whites' attitudes towards blacks manifests a negative affect towards black people. Since the overall social climate no longer tolerates overt hostility against blacks, this negative affect is expressed in a more cunning way. White people in general would not show their attitudes by attributing the innate inferiority to black people, such as biological racists believed that black people were biologically inferior to whites. Instead, they mix their negative affections with some typical American values and attribute the current disadvantaged position of black people to the lack of individualism, self-reliance, the work ethic, obedience, and discipline (Kinder & Sears, 1981). Also many white people believe that there are no racial barriers for black people to access opportunities in the society because whites are no longer racially prejudiced (Kluegel & Smith 1986).

The group conflict explanation focuses on the tangible

interests of different groups. Although in principle whites would like to promote racial equality, when the interest of their own group is threatened by improving the situation of black people, they will show their resistance to the real change in the society.

Historically, white people has been in a dominant position in American society in many respects, such as economic, educational, social status, and so forth. It is still true in today's United States. If black people achieve a position equal to white people in the society, it will imply that white people should give up part of their share of various resources and lose their dominant position in the society. Facing the possible threats to their material share and social status, whites adopt a negative attitude towards the efforts of redistributing various resources to help black people achieve the real equal position as part of their efforts to protect the interests of themselves. White people would like to favor the principle that all people are equal and admit the rights of black people to equal opportunity. But they would not like to see that the efforts to improve the situation of black people will go over the limits to threaten their own dominant position and their share of various socioeconomic resources in the society.

The two kinds of theoretical explanations of contemporary whites' attitudes towards blacks start from different perspective, either whites anti-black feeling or the knowledge of potential threat to group interests of whites. But they both

agree that, in contemporary America, white people would not like to give up very much to improve the situation of black people.

More importantly, besides the theoretical explanations of whites racial attitudes toward blacks, these two approaches provide the analysis of several key factors in black-white relation. First, although overt discrimination against blacks is no longer tolerable in the society, many whites still hold negative affect toward blacks. This negative affect is the consequence of long time racial discrimination against blacks. It can be viewed as the residual of traditional racism.

Second, the focus of black-white relation in contemporary American has shifted "from struggles over acquiring basic civil rights to struggles over actually redistributing educational, economic, political, and social resources" (Bobo 1988, p.85). Many government policies which aim at redistribute resources to blacks and other minorities to improve their situations manifest this change in the society. Given the fact that there are limited resources in the society, it means that whites have to give up part of their share of various resources to fit the general climate of society.

The research on black people's attitudes toward black-white relation is quite sparse. Schuman et. al. (1988), based on the data of several national survey researches, showed that supports from black people for racial equality, in both the principle and the implementation, were significantly stronger than that of white people. One point is worth noting here that historically,

it is mainly based on the liberal ideology that the government set forth a series of implementation policies to promote racial equality, such as busing, affirmative action, housing desegregation, and so forth (Patterson, 1986). An important point of the liberal ideology is that the flaw of social structure in the society is a major factor to cause social problems. It is necessary to do some reform to get rid of those flaws in order to solve the problems. So blacks' support for these government policies could serve as the evidence that they would adopt liberal ideology to explain their current situations.

Although the direct evidence on blacks' attitudes toward black-white relation is quite scarce, it is still reasonable to infer that as a disadvantaged group in the society and with a long history of being exploited by whites, black people in general are more likely to adopt liberal ideology to explain their current situation. They would view the unfair treatment they received from the dominant group and the innate flaws of social structure which give dominant group more opportunities in the society as the major causes of their disadvantaged situation. Based on such a recognition, the effective way for black people to achieve the equal treatment in the society and the equal opportunities for various resources is to favor redistributing various resources to black people. That is why black people have significantly stronger support to implementation policies in comparison with white people.

In conclusion, what characterizes the black-white relation in

contemporary America is: a) many whites still hold negative affect toward blacks though overt racism is no longer tolerated in the society; b) there is a great efforts to redistribute various resources to black people and as a consequence, whites have to give up part of their share; c) for the racial attitudes, white people on the one hand would not like to give up a lot from their share of various resources to promote real racial equality, and believe that black people themselves should be responsible for their own situations, even though traditional racism has been viewed as socially undesirable; d) on the other hand, black people still consider that the redistribution of various resources is an effective way to solve the problems and they believe that current social structure is responsible for the disadvantaged situation of blacks.

Intergroup perceptions regarding the information which is relevant to black-white relation.

Given such a social context, now it is the time to look at the possible ways for different group members to favor their own groups in intergroup perception. In this study, the objective information regarding different groups for what the respondents were asked to give their judgments is divided into two categories: socioeconomic rewards and socially undesirable behaviors. Specifically, annual family income, unemployment rates, poverty levels, the percentage of college graduate, and the average salary of college graduate belong to the category of socioeconomic rewards. This category has an important feature that the information of these items reflect the situations of the

share of black and white people of various resources in the society. My first hypothesis deals with this category.

In contemporary America, the overall situation of blacks is inferior to whites. There is a significant gap between whites and blacks in their social, economic, political, educational status. This is the fact that few people would doubt. Mainly because of this fact, various policies have been proposed to improve the situation of black people and narrow or eliminate the socioeconomic gap between whites and blacks. What characterizes most of those policies, such as busing, affirmative action, housing desegregation, is the effort to redistribute various resources. But comparing to whites, how much worse is the blacks situation? It is reasonable to guess that people from different groups will have different answers to this question. The answers will reflect their perceptions regarding blacks situation in relation to that of whites and could serve as cognitive bases of their attitudes, beliefs, behaviors, and other psychological activities in a white-black context.

As pointed out above, in general, from either the negative affect of whites toward blacks or their consideration of protecting interest of white group, white people would not like to give up significant part of their share of various resources in the society to install true racial equality, which they support in principle. On the contrary, black people still think that redistribution of various resources towards blacks is an effective way to realize racial equality.

From the perspective of equity theory (Taylor & Moghaddam, 1987), the advantaged group feels some kinds of tension when they treat other groups unfairly. This tension could serve as an impetus to driven them to restore a justice relation among own and other groups. However, for advantaged group, the strategy selected to realize this purpose usually is to restore psychological equity. They would perceive that other groups either have lower input, or get more reward than they actually do. Both strategies could provide a perception that the disadvantaged groups already get what they deserve. In this way, the members of advantaged group can release the tension they suffer by biasing the cognition of unfair treatment to other groups and still keep their advantaged position.

Meanwhile, unfair treatment could drive disadvantaged group to find the way to restore equity as well. But in contrast to advantaged group, they are more likely to choose a way to restore real equity and get the share of various resources which they deserve so that their actual gain will increase. Especially in a situation where no severe barriers exist to block their will, the strategy to restore real equity should have priority to be selected.

Given such a social background and theoretical base, my first hypothesis is that, as the members of an advantaged group, white people might perceive the gap between blacks and whites on the items of socioeconomic rewards to be much smaller than what black people perceive. Such a perception could provide them a rationale for not giving black people more opportunities to access various

resources since their actual situation in white people's minds is not very bad. It implies that black people do not need very much to improve their situations furthermore and white people could still keep what they already get and avoid the danger of losing their dominant position in the society without feeling much guilty for their inconsistent attitudes.

On the other hand, black people, as the members of a disadvantaged group, tend to perceive the gap much larger than white people do so that they could claim more share of various resources than what white people would like to give up to improve their situations and finally achieve equal status in the society. The perception in this way could serve as the cognitive base of actual activities to benefit black people.

My second hypothesis deals with the other category of objective information which is relevant to black-white relation. The rates of women in welfare, unwed born baby rates, drug abuse rates in white and black populations respectively, and the portions of blacks and whites in total arrests due to violent crime belong to the category of socially undesirable behaviors. These items reflect some negative aspects of each group which are different in nature from those items which focus on socioeconomic reward. So the respondents might show difference in perceiving the situation of socially undesirable behavior of both blacks and whites.

For the socioeconomic reward items, the worse situation of

black people does not hurt their self-concepts very much. From the perspective of liberal ideology, which is widely accepted by blacks, such a situation is mainly the consequence of long time racial discrimination against blacks. Blacks themselves should not be held responsible for their inferior socioeconomic situations. But things are different for the items of socially undesirable behaviors. The worse situation should not be comfortable for black people themselves.

From the perspective of social identity theory (Tajfel 1981; Taylor & Moghaddam 1987), group identity serves as the part of person's self-concept. People identify themselves with certain groups in order to get positive self-concept. Positive image of the group which people identified with could enhance their own self-concepts. This tendency could drive people to diminish, or even reverse the negative aspects of their own group in order to achieve a more positive social image. Especially those who are the members of groups which are in an inferior position in the society might have a stronger need to booster the positive social image of their own group.

Following this logic, my second hypothesis would be that the differences between the perception of black respondents regarding the situations of blacks and whites on those items of socially undesirable behaviors will be smaller than what white respondents do. Or black respondents would perceive the differences of those negative items in the directions which are opposite to what white respondents perceive. In this way, it could give black people a more positive social image in their mind.

Finally the accuracy of the intergroup perceptions of both black and white respondents will be tested. That could provide the information about how much the effect of group identity could biased the objective information and the effect of actual situation on intergroup perception. There are two dimensions of the accuracy of intergroup perception: direction, which refers to whether the direction of subjective perceptions regarding those group-relevant information will in the same or opposite direction of actual situation; and magnitude, which refers to the differences between the perceived situations and actual situations.

In summary, there are three tasks in this study. First, the comparison between the perceptions of blacks and whites on the socioeconomic reward situation of both groups. Second, the comparison between the perceptions on the situations of socially undesirable behavior of both groups. Third, the comparison between the subjective perceptions and actual figures on both socioeconomic reward and socially undesirable behavior items of the two groups.

METHOD

This study applies the data from one of Professor Stan Kaplowitz's current research projects, a telephone survey research of black and white people's racial attitudes and perceptions. The target population of this study is white and

black people around the Greater Lansing area. The initial sampling plan was to create two samples which are equal in number for blacks and whites respectively by random sampling so that blacks and white could be examined equally. Specifically, there should be 150 blacks and 150 whites. The finally achieved sample contains 216 whites and 60 blacks due to the difficulty of finding black households to interview by using CATI (Computer Aided Telephone Investigation).

In the part of the questionnaire regarding the perception of group relevant information, there are three kinds of forms for asking respondents questions. In the first form, the respondents were given the actual figures regarding the situation of white people and asked to estimate the situation of blacks. The second form provides respondents the actual figures of black people and asks them to estimate the situation of whites. The third form gives respondents no information and they were asked to estimate the situations of both blacks and whites.

In this study, my attention focuses on form three. I think that the results of this form can reflect the subjective perception better than form one and two because there is no objective information to influence the respondents. From the perspective of statistical analysis, form three is also superior to other two because there are more black respondents. The achieved sample for this form contains 98 respondents, 26 blacks and 72 whites respectively. Table 1. shows the demographical characters of those respondents.

TABLE 1. DEMOGRAPHIC CHARACTERS OF THE RESPONDENTS

		BLACK	WHITE	TOTAL
GENDER	MALE	4	30	34
	FEMALE	22	42	64
AGE*	25 OR LESS	4	7	11
	26-35	9	19	28
	36-45	10	22	32
	46-55	2	11	13
	56 OR MORE	0	13	13
EDUCATION LEVEL	NOT FINISH HIGH SCHOOL	0	5	5
	HIGH SCHOOL	6	14	20
	SOME COLLEGE	11	34	45
	BACHELORS	6	11	17
	SOME GRADUATE WORK	1	1	2
	MASTER	1	7	8
	DOCTOR	1	0	1
ANNUAL FAMILY INCOME* (IN THOUSAND)	\$0-10	1	3	4
	\$10-20	2	10	12
	\$20-30	6	9	15
	\$30-40	9	20	29
	\$40-50	2	9	11
	\$50-60	3	7	10
	\$60-80	2	8	10
	\$80-100	1	3	4
	\$100-150	0	2	2

NOTE: * THE SAMPLE FOR FORM THREE CONTAINS 98 RESPONDENTS, 26 BLACKS AND 72 WHITES RESPECTIVELY. SOME FREQUENCIES DO NOT ADD UP THE ACTUAL NUMBER OF EACH GROUP DUE TO MISSING DATA.

The way to determine the ethnic identity of respondents is based on their self-reports. During the phone survey, the respondents were asked to estimate the actual situations of both blacks and whites in the society without providing them heuristic information. Their answers reflect their beliefs about the average annual family income, unemployment rates, poverty levels, the rates of women in welfare, the rates of unwed born baby, the rates of drug abuse, the rates of college graduate and the

average salary of college graduate in blacks and whites populations respectively, and the portion of blacks and whites in total arrests due to violent crime. The questions in form 3 which were used in the phone survey are listed in appendix A.

RESULTS

There are two ways to measure the effect of group identity on intergroup perception, as could use either the difference between the perceptions regarding whites and blacks situations, or the ratio of perceptions regarding whites situation to that of blacks. In order to find which one was more valid to reflect the way by which people perceive group-relevant information, multiple regression analysis was carried out to test the association of respondents' racial attitudes to the differences and the ratios of subjective perceptions. The results show that difference variables have stronger association to respondents' attitudes toward racial relation than ratio variables do. It suggests that difference variables are more valid to measure intergroup perception in this study (see appendix B.). So I selected the difference between the perception regarding the situation of whites and blacks as dependent variable. The following is the operational definition of difference variable:

DIFFERENCE=THE PERCEPTION REGARDING WHITE SITUATION - THE PERCEPTION REGARDING BLACK SITUATION

To simplify the descriptions of these difference variables, I name all nine difference variables. Specifically, FAMINCDF stands for the difference between perceptions regarding average family

annual income; UNEMPLDF for unemployment rates; POVERTDF for poverty level; COLGRADF for the percent of college graduates; and COLINCDF for the average salary of college graduates. WELFARDF for the rates of women in welfare; UNWEDBDF for the rates of unwed born baby; ARRESTDF for the portions in total arrests due to violent crime; DRUGUSDF for drug abuse rates.

In addition, ONEWAY, ANOVA, and MULTIPLE REGRESSION analysis which are used in this study require the normality of residual distribution. It means that the skewness of the distribution of dependent variable should equal zero. A skewness ranges between -1 and +1 is acceptable in application. In order to meet the requirement, the difference variables used in statistical analysis, except for descriptive analysis, are transformed by logarithmic function to be less skewed (see Appendix C).

The accuracy of intergroup perception.

For each difference variable, there are statistic figures available regarding the actual situations of both blacks and whites. The comparison between actual differences and perceived differences could provide the information of how people's group identity would influence their views about actual intergroup situation. Also it can show the relation of the differences between the actual situations which people's perceptions are based on, and the perceived situations which people's social activities are based on.

There are two dimensions of the accuracy of perception:

direction, whether the perception is in the same direction of actual situation or not, and magnitude, how much the subjectively perceived differences differ from the actual differences.

Table 2. shows the means of all difference variables by respondents' ethnic identities and the actual differences of each item. As just mentioned, all variables used in descriptive analysis are not transformed by logarithmic function. According to the definition, the difference variable is calculated as perceived white situation minus perceived black situation. So the positive values of perceived differences mean that the perceived white figures are greater than those of blacks, and the negative values mean that the perceived white figures are smaller than those of blacks. For the actual difference, it is calculated as actual white figure minus actual black figure.

TABLE 2. SUMMARY OF PERCEIVED AND ACTUAL DIFFERENCES

VARIABLES	BLACK PERCEPTION	WHITE PERCEPTION	ACTUAL DIFFERENCE
SOCIOECONOMIC REWARD:			
FAMINCDF	\$16115 (\$11893)	\$9491 (\$6822)	\$14586 (1988)
UNEMPLDF	-19.60 (12.64)	-9.20 (10.30)	-7.0 (1988)
POVERTDF	-23.65 (14.80)	-12.61 (10.07)	-21.5 (1988)
COLGRADF	31.24 (25.47)	17.24 (14.16)	9.6 (1988)
COLINCDF	\$7923 (\$8593)	\$3174 (\$6159)	\$7478 (1989)

SOCIALLY UNDESIRABLE BEHAVIOR:

WELFARDF	-12.36 (23.45)	-9.48 (12.20)	-11.0 (1984)
UNWEDBDF	-20.08 (19.23)	-11.89 (11.89)	-45.8 (1988)
ARRESTDF	-20.84 (24.69)	-11.76 (20.27)	9.0 (1990)
DRUGUSDF	-6.76 (11.63)	-5.67 (9.37)	-2.4 (1990)

NOTE: 1) THE NUMBERS IN PARENTHESES ARE STANDARD DEVIATION FOR INTERGROUP PERCEPTION AND THE YEAR OF DATA FOR ACTUAL DIFFERENCES.

2) THE SOURCES OF ACTUAL FIGURES:

ANNUAL FAMILY INCOME, UNEMPLOYMENT RATE, POVERTY LEVEL, AND THE PERCENT OF COLLEGE GRADUATES: "STATISTICAL ABSTRACT OF THE UNITED STATES:1990".

ARRESTS DUE TO VIOLATE CRIME: "CRIME IN THE UNITED STATES: 1991".

UNWED BORN BABY: "VITAL STATISTICS OF THE UNITED STATES: 1988".

COLLEGE GRADUATE EARNING: "CURRENT POPULATION REPORT. SERIES P-60, NO. 172".

DRUG ABUSE RATE: "NATIONAL HOUSEHOLD SURVEY ON DRUG ABUSE".

WOMEN IN WELFARE: "A COMMON DESTINY: BLACK AND AMERICAN SOCIETY".

From Table 2, we can tell that the directions of subjective perception regarding the differences between the situations of blacks and whites are the same as actual ones for most items except for ARRESTDF. Generally, both black and white respondents perceive that the situation of black people in the society is inferior to that of white people. This tendency is so strong that although as matter of fact, more whites are arrested for violent

crime in the U.S., the respondents still perceive that more blacks are arrested.

The variations between the magnitudes of perceived differences and actual differences do not show a clear pattern. There is no consistent tendencies that respondents would over- or under estimate situations of both groups comparing to actual figures, or one group would be more accurate in intergroup perception than the other. In fact, some items are overestimated, whereas others are underestimated. On some items, e.g. FAMINCDF, black respondents overestimated the actual situation whereas whites underestimated. But on other items, e.g. UNWEDBDF, DRUGUSDF, and COLGRADF, both groups tend to make errors in the same direction.

The exception on ARRESTDF is an interesting case. The actual questions for respondents are: "What percentage of all those arrested for violent crime are whites?" and "What percentage of all those arrested for violent crime are blacks?". I guess that there are several factors could account for respondents' answers. First, for all other eight questions, the respondents were asked to estimate the situations among black and white population in the nation separately. But in ARRESTDF question, respondents were asked to estimate the portions of blacks and whites in a population of those arrested due to violent crime. So the respondents might still follow the same line of thinking in other questions and actually give their estimation about the percentages of arrest due to violent crime in black and white populations. In this aspect, the actual situation of blacks is

worse than whites because crime rate in black population is higher than in white population.

Second, the question is the portion of arrests but not the portion of those who commit violent crime. In a common view, especially among blacks and some liberal whites, black people are much more likely arrested for violent crime than whites due to police bias. They would perceive that more blacks are arrested even though not all of them committed to violent crime. Third, the actual white figure may include most hispanics who are arrested for violent crimes whereas the perceived white figure probably does not. In other words, if we exclude the hispanic figure from both white and black figures, the actual direction may be the same as perceived one.

The patterns of the differences between the perceptions of black and white respondents.

It would be more meaningful to compare the magnitudes of the subjective perceptions of the two groups in an interrelated way. The perception of the members of one group regarding the actual situations of both groups reflects their beliefs about their positions in the society in relation to another group. The particular relation between the perceptions of these two group members are more important than the absolute value of the perception itself because it provides the cognitive base of people's behavior in intergroup situation.

The pattern of responses on those items which reflects the socioeconomic rewards of both group, as I guessed previously,

should be that black respondents tend to perceive bigger differences than white respondents do. In table 2, it clearly shows that black respondents consistently perceive bigger differences on FAMINCDF, UNEMPLDF, POVERTDF, COLGRADF, and COLINCDF. In order to test whether the differences between the perceptions of black and white respondents are statistically significant, one-way analysis by race is carried out. The results of one-way analysis of all nine items are listed in Table 3. It also shows that the effect of race on all those five variables are statistically significant at $p < 0.01$ except for COLGRADF at $p < 0.05$. Therefore, this hypothesis is supported by the results from all socioeconomic reward items.

TABLE 3. SUMMARY OF ONEWAY ANALYSIS ON DIFFERENCE VARIABLES

VARIABLE	ETA SQUARE	F RATIO (D.F.)	SIGNIFICANCE OF F
SOCIOECONOMIC REWARD:			
FAMINCDF**	0.096	9.0203 (1, 85)	0.0035
UNEMPLDF**	0.175	19.1026 (1, 90)	0.0000
POVERTDF**	0.156	17.5384 (1, 95)	0.0001
COLGRADF*	0.075	6.3368 (1, 78)	0.0139
COLINCDF**	0.102	10.5429 (1, 93)	0.0016
SOCIALLY UNDESIRABLE BEHAVIOR:			
WELFARDF	0.006	0.6055 (1, 93)	0.4385

UNWEDBDF*	0.041	4.0160 (1, 93)	0.0480
ARRESTDF	0.034	3.2829 (1, 93)	0.0732
DRUGUSDF	0.001	0.0881 (1, 93)	0.7673

NOTE: 1) ** (p<.01). * (p<.05).

2) THE NUMBER IN PARENTHESES ARE THE DEGREE OF FREEDOM FOR F-RATIO.

The case is quite complicate for the results which are relevant to my another hypothesis about perceived differences on the situations of socially undesirable behavior. I guessed that, from the perspective of social identity theory (Tajfel 1981), in order to achieve positive group identity, black respondents would narrow, diminish the gaps on those items about socially undesirable behavior, or they would even reverse the direction of the gap, comparing to what white respondents perceived so that they could give their own group a more positive image. But a significant fact manifested in Table 2 is that across all 9 items, regardless of the nature of objective information whether is about socioeconomic reward or socially undesirable behavior, black respondents consistently perceive the bigger differences between the actual situation of whites and blacks, or in other word, white respondents consistently perceive the smaller differences than blacks do. This is contrary to what expected in advance.

However, more advanced statistical analysis reveals that there does exist significant difference between the perceptions

on socially undesirable behavior and socioeconomic reward. The results of one-way analysis show that the effect of group identity is statistical significant at the level of $p < .05$ only on one out of the four items which reflect the situation of socially undesirable behavior, comparing to five socioeconomic reward items which are all significant at $p < .01$ except for COLGRADF at $p < .05$. This fact, not statistically significant vs. statistically significant, illustrates that respondents do perceive the situation of socially undesirable behavior of both groups in different ways.

To explain the discrepancy between the hypothesis on socially undesirable behavior and actual results, we need to go back to the analysis of black-white in contemporary American society. As mentioned earlier, white people tend to believe that black people themselves are responsible for their current situation, due to either their innate inferiority or to lack of white values, such as work ethic, individualism, self-reliance, discipline, and so forth. On the contrary, black people still believe that the historical racism and exploitation from whites are the major causes of current black situation. It implies that, from the perspective of blacks, white people should be held responsible for the social problems in black population.

Following such a logic, it can provide some reasons to understand why black people show some tendency to expand the gaps between blacks and whites even in their perceptions regarding those items of socially undesirable behavior. An important nature

of these items is that they are the objective facts which directly reflect the current situation of black people. Since the historical racism and the exploitation from whites are seen by blacks as the major causes of their current situation, it would not harm blacks themselves very much to perceive that all aspects, both positive and negative ones, of black situation worse than those of whites. On the contrary, from the perspective of blacks, the worse the situation of black people is, the more whites owe blacks. It implies that white people should give up more to improve the situation of blacks because it is they who are responsible for the current situation of black people.

However, those negative facts are not socially desirable in any respects. They can not do any good to the social image of black people. From the consideration of enhancing positive self-concept, they would like to narrow or diminish the gaps on those items, or even reverse the direction of the gaps as previously predicted. As the result of the coordination of these two factors, the perceptions of black respondents on those items are neither significantly expanding the gap nor reversing the direction of the gap. It seems that the tendency of favoring their own group and disfavoring out group in their perceptions regarding those items is influenced by the considerations of both positive self-concept and the claim for more share of various resources in the society.

There is some empirical evidence supporting this explanation.

In the questionnaire used in phone survey, there are several items in which the respondents are asked to give their subjective judgments which reflect their beliefs about that among all black or white people, what percent of them are lazy, intelligent, and dependable. LAZYDF, INTEDF, and DEPEDF stand for the differences between the perceptions regarding white and black figures on laze, intelligent, and dependable respectively (see appendix A. for the actual questions).

Comparing to socially undesirable behavior, it is much more difficult to blame other people for one's own personal characters. If one perceived the personal characters of the members of his own group negatively, it would be no doubt that the positive image of his own group could be harmed. Consequently, it could hurt one's own self-esteem. So I think my second hypothesis might be better manifested on those items regarding the personal characters of different group members.

When the respondents perceive these items, in order to favor their own group, to achieve a positive image for their own group would be the major consideration and there would be no other important considerations to compete with it. It implies that black respondents would perceive smaller or no differences on INTEDF, DEPEDF, and LAZYDF than white respondents do, or they even perceive the differences in a opposite direction to what white respondents do. Table 4 lists the means of these three variables for total, black, and white respondents. According to the definition, the difference variable is the perceived white

figure minus perceived black figure. Negative values mean that the perceived white figures are bigger than those of blacks, and positive values mean that perceived white figures are smaller.

TABLES 4. SUMMARY OF THE MEANS OF THE PERCEPTIONS REGARDING PERSONAL CHARACTERS

VARIABLE	TOTAL RESPONDENTS	BLACK RESPONDENTS	WHITE RESPONDENTS
LAZYDF	-6.18 (14.16)	-2.65 (20.09)	-7.31 (11.62)
DEPEDF	2.94 (14.19)	-0.92 (20.68)	4.30 (10.93)
INTEDF	4.21 (10.16)	5.60 (13.59)	3.72 (8.71)

NOTE: 1) THE NUMBERS IN PARENTHESES ARE STANDARD DEVIATION.

2) THIS TABLE IS BASED ON THE DATA FROM RESPONDENTS WHO ANSWERED QUESTIONS IN FORM 3.

On the items which have stronger moral connotations, such as lazy and dependable, the difference perceived by black respondents is smaller than what perceived by white respondents. That is in the direction of perceiving their own group more positively, comparing to the perception of outgroup members. So the results on these two items are the same to what expected in advance. However, the result of INTEDF is quite strange. It shows that black respondents tend to perceive the difference between whites and blacks on intelligence bigger than what white respondents perceived. This result raises some questions for future study.

The respondents' attitudes towards black-white relation.

The attitudes of both blacks and whites toward racial relations in contemporary American society serve as part of the background in this study. As discussed earlier, other studies have shown that many white people think that the society is no longer racially discriminative, they still have negative feeling towards blacks, and they would not like to promote the implementation of programs to redistribute socioeconomic resources although whites are positive towards racial equality in principle. This is also shown here. Three attitudes scales were constructed to reflect people's oppositions to affirmative action, their beliefs in the existence of little discrimination against black people, and their positive attitudes towards black personal characteristics. AFFACT, BELDIS, and BLKPER stand for these three scales respectively (see appendix D for details). Table 5 summarizes the results of analysis of these three scales for the total sample, black, and white respondents separately:

TABLE 5. SUMMARY OF THE ANALYSIS ON ATTITUDE SCALES.

SCALE	MEAN SCORE	S.D.	N
AFFACT*			
TOTAL	-0.0595	2.1708	90
BLACK	-0.9277	2.2050	22
WHITE	0.2214	2.0995	68
BELDIS**			
TOTAL	0.1576	4.7949	94
BLACK	-3.1484	3.8295	26
WHITE	1.4217	4.5362	68
BLKPER			
TOTAL	-0.4789	3.9801	89
BLACK	0.8534	4.5353	22
WHITE	-0.9163	3.7137	67

NOTE: AFFACT: ATTITUDES TOWARDS AFFIRMATIVE ACTION. POSITIVE SCORE MEANS OPPOSITION AGAINST AFFIRMATIVE ACTION.

BELDIS: ATTITUDE TOWARDS CURRENT RACIAL DISCRIMINATION AGAINST BLACKS. POSITIVE SCORE MEANS THE BELIEF OF LITTLE DISCRIMINATION IN THE SOCIETY.

BLKPER: ATTITUDES TOWARDS PERSONAL CHARACTERISTICS OF BLACKS. POSITIVE SCORE MEANS THE BELIEF THAT BLACKS HAVE DESIRED PERSONAL CHARACTERISTICS.

** ($p < 0.01$), AND * ($p < 0.05$) IN ONE-WAY ANALYSIS BY RACE.

In general, black respondents support affirmative action, believe that there are still racial discrimination against blacks, and are more positive towards the personal characters of black people. On the other hand, white respondents tend to believe there is a little discrimination against blacks in the society, hold more negative attitudes towards affirmative action, and are more negative towards the personal characters of blacks. Also the results of one-way analysis by race show that there are significant difference between the attitudes of blacks and whites toward affirmative action and current racial discrimination. These results are consistent with the findings from other studies. So the respondents' attitudes towards black-white relation are similar to the general situation in the United States. This fact provides some legitimacy for my earlier discussion about the specific ways that black or white respondents favor their own group and disfavor outgroup in intergroup perception which was based on the findings from other studies about current situation of black-white relation in the United States.

Conclusions

The findings of this study provide the support for the hypotheses that group identity have influences in intergroup perception and the direction of influence is towards favoring own group at the expense of outgroup in a real context. The pattern of perceived differences on socioeconomic rewards of both groups are exactly what was predicted in advance. The advantaged group would tend to narrow the gaps between own and out- groups, whereas disadvantaged group would subjectively expand the gaps.

Although the results do not perfectly match the initial hypothesis on socially undesirable behavior, they still show that the way by which the respondents perceive those information is different from that of perceiving socioeconomic reward information. The differences between the perceptions of black and white respondents on socially undesirable behavior are significantly smaller than those on socioeconomic rewards. The discrepancy between the initial hypothesis and actual results suggested that the mechanism of perception on those items is more complicated. Comparing to the pattern of perceptions on socioeconomic rewards and personal characters regarding blacks and whites, I think that both equity theory and social identity theory might be applied to explain the intergroup perceptions regarding the situations of blacks and whites on socially undesirable behavior in contemporary American society. That is the considerations of both restoring actual equity and positive self-concept have the effects for blacks in perceiving those

information. This should be the topic for future study.

The historical legacy and current circumstance are important factors to affect people's psychological activities. It is also true in this study. The actual situation of the relations of both groups in the society set the general direction of psychological activities for group members. What they perceived about the information regarding the relation of both groups is in the same direction of actual situation except for the portions of blacks and whites in the total arrests due to violent crimes. Moreover there are several factors which are related to this exception. In other word, the directions of people's perceptions about the differences are very accurate. Group identity does not have strong effect on this dimension of intergroup perception in the study.

In reality, the respondents have various opportunities to get objective information about the overall situation of black-white relation through various channels, such as news media, their social network, community center, and so forth. They could have enough knowledge about the actual situation at this level. When dealing with the questions about the direction of differences, they could make their judgments about the overall situation mainly on objective information and come up with accurate conclusions. This might be the major cause of their accurate perception about the direction of differences.

The current socioeconomic and psychological status of blacks

and whites are given a great deal of attention in this study. It provides the framework to determine the pattern and the connotation of intergroup perception, and integrate the subjective perception with other psychological activities. This consideration is proved necessary. It would be impossible to think about the possible way by which group members favor their own group and disfavor the outgroup in intergroup perception, if I did not consider the current socioeconomic situation and the people's psychological status in contemporary American society for black-white relation. Moreover, the respondents' attitudes toward affirmative action, current situation of racial discrimination, and the personal characters of blacks illustrate that the major features in the context of this research is similar to that of the whole nation which is discussed early. It provides the legitimacy of my discussion about current racial attitudes toward black-white relation. The research hypotheses which are based on both theoretical knowledge and the recognition of the society fit quite well into the whole picture.

The nature of the objects which are perceived by respondents is another factor which has influence on intergroup perception. The respondents show different ways in their perception regarding socioeconomic reward, socially undesirable behavior, and personally characters of own and out- group members. The respondents mainly followed the logic of equity theory in perceiving the situation of socioeconomic reward of different groups. Some evidence in this study show that the logic of social identity theory were applied in perceiving personal characters.

In the perception of socially undesirable behavior, the respondents seems to try balancing the considerations of both socioeconomic reward and social image of their own group. There needs more researches to test the latter two conclusions.

One problem which created difficulty in data analysis is that the number of black respondents for form three is too small to split them into subgroup for the analysis of the interaction of other factors with race. This fact limits the power to explain the findings in depth (e.g. the effect of exposure to news media and the educational level of respondents on their intergroup perceptions). Another problem is that the composition of black respondents of form three is overwhelmingly female. It could raise some questions on the data of intergroup perceptions of black respondents. These are the problems which should be dealt with in future study.

Appendices

Appendix A.

a) QUESTIONS IN FORM 3.

1. What do you think is the average income of white families?
2. What do you think is the average income of black families?
3. What do you think is the unemployment rate among whites?
4. What do you think is the unemployment rate among blacks?
5. What do you think is the percentage of whites living in poverty?
6. What do you think is the percentage of blacks living in poverty?
7. What do you think is the percentage of white women receiving welfare?
8. What do you think is the percentage of black women receiving welfare?
9. What do you think is the percentage of white babies born to unwed mothers?
10. What do you think is the percentage of black babies born to unwed mothers?
11. What percentage of all those arrested for violent crimes are whites?
12. What percentage of all those arrested for violent crimes are blacks?
13. What do you think is the percentage of whites who used illegal drugs in the past month?
14. What do you think is the percentage of blacks who used illegal drugs in the past month?
15. What percentage of whites over the age of 25 do you think are college graduates?
16. What percentage of blacks over the age of 25 do you think are college graduates?
17. How much do you think the average white male college graduate earns?
18. How much do you think the average black male college graduate earns?

b) QUESTIONS REGARDING THE PERSONAL CHARACTERS OF BLACKS AND WHITES.

1. Out of every 100 blacks, how many of them do you think are lazy?
2. Out of every 100 whites, how many of them do you think are lazy?
3. Out of every 100 blacks, how many of them do you think are intelligent?
4. Out of every 100 whites, how many of them do you think are intelligent?
5. Out of every 100 blacks, how many of them do you think are dependable?
6. Out of every 100 whites, how many of them do you think are dependable?

Appendix B. THE COMPARISON BETWEEN DIFFERENCE VARIABLE AND RATIO VARIABLE.

There are two ways to test the effect of group identity on intergroup perception. One is to compare the ratio of the subjective perceptions regarding the information of own group to that of outgroup. The other is to compare the difference between subjective perceptions regarding own and out-groups. Both are widely used in social science researches. The following are the definitions of these two kinds of variables in intergroup perception:

**RATIO=THE PERCEPTION REGARDING WHITE SITUATION / THE
PERCEPTION REGARDING BLACK SITUATION**

**DEFERENCE=THE PERCEPTION REGARDING WHITE SITUATION - THE
PERCEPTION REGARDING BLACK SITUATION**

In some studies on intergroup perception, either laboratory or survey studies (Schaller, 1991; Kelley, 1990; Allen & Stephenson, 1983), the researchers adopted the difference as dependent variables to measure the effect of group identity, both qualitatively and quantitatively. At meantime, others tend to use ratio as dependent variable. Especially from the perspective of equity theory, the way to determine whether the relation between two groups is fair or not is to calculate the ratio of the input and output of both group. In this study, to find which one could be better indicator of the way by which the respondents perceive group-relevant information, their relations to respondents' racial attitudes were investigated.

Three attitude scales were constructed which are based on the data from Kaplowitz's study: respondents' oppositions to affirmative action, their beliefs in the existence of little discrimination, and their positive attitudes towards blacks' personal characters (see appendix D for detail). If one of these two kinds of variables reflects the way of respondents' perception better, it should have stronger associations with these attitudes scales. In order to find out the better indicator, multiple regression analysis was conducted by using ratio and difference as independent variables respectively. The dependent variables in multiple regression equations are three attitude scales and race. Table 6, 7, 8 list the results of analysis. AFFACT, BELDIS, and BLKPER stand for the scales of opposition to affirmative action, beliefs of little current discrimination, and positive attitudes towards blacks' personal characteristics.

TABLE 6. CORRELATIONS OF RATIO VARIABLES TO ATTITUDE SCALES

	AFFACT	BELDIS	BLKPER
FAMINCRA	.008*	-.132	.103*
UNEMPLRA	.108*	.157	-.202*
POVERTRA	.225	.180	.031
COLGRARA	-.038	.060	-.129*
COLINCRA	-.290	-.322	.172
WELFARRA	.155	-.014	-.063*
UNWEDBRA	-.026	-.113	-.018
ARRESTRA	.176*	-.163*	.047*
DRUGUSRA	.264	-.035	.007*

NOTE: * INDICATES THAT THE CORRELATION IS BIGGER THAN ITS COUNTERPART IN TABLE 7.

VALID OBSERVATIONS ARE 58 (CASEWISE DELETION).

TABLE 7. CORRELATION OF DIFFERENCE VARIABLES TO ATTITUDE SCALES

	AFFACT	BELDIS	BLKPER
FAMINCDF	-.001	-.283*	.057
UNEMPLDF	-.081	-.206*	.072
POVERTDF	.231*	.366*	.047*
COLGRADF	-.165*	-.156*	.070
COLINCDF	-.319*	-.404*	.245*
WELFARDF	.163*	.117*	-.030
UNWEDBDF	-.168*	-.218*	.098*
ARRESTDF	.153	-.123	-.016
DRUGUSDF	-.342*	-.115*	-.003

NOTE: * INDICATES THAT THE CORRELATION IS BIGGER THAN ITS COUNTERPART IN TABLE 6.

VALID OBSERVATIONS ARE 58 (CASEWISE DELETION).

TABLE 8. R SQUARES IN MULTIPLE REGRESSION EQUATIONS AND SUMMARY OF THE RESULTS OF ANOVA.

EQUATION	R SQUARE	F RATIO	SIGNIFICANT F
RATIO AS INDEPENDENT VARIABLES			
AFFACT	0.1807	1.0365	0.4287
BELDIS	0.2919	1.9373	0.0633
BLKPER	0.1287	0.6944	0.7244
DIFFERENCE AS INDEPENDENT VARIABLES			
AFFACT	0.2479	1.5490	0.1523
BELDIS	0.3550	2.5868	0.0138
BLKPER	0.1345	0.7302	0.6924

NOTE: D.F. IN ANOVA IS (10,47) AND VALID OBSERVATIONS ARE 58 (CASEWISE DELETION).

The results show that the correlations of difference variables to attitude scales are generally bigger than that of ratio variables. 17 out of 27 correlation coefficients in table 7 are bigger than their counterparts in table 6. Also the R squares are bigger in the regression equations which use difference variables as independent variables than those in the equations which use ratio variables. It suggests that difference variables reflect the way of respondents in perceiving objective information better than ratio variables do. So difference variables are selected as dependent variables to measure intergroup perception in this study.

Appendix C. TRANSFORMATIONS OF DEPENDENT VARIABLES.

Oneway, anova, multiple regression analysis require the normality of residual distribution. That means the skewness of the distribution of dependent variable should be zero. In application, a skewness between -1 and +1 is tolerable. In this study, most of the raw data of difference and ratio variables are highly skewed. To meet the statistical requirement, the raw data are transformed by logarithmic function before carrying out analysis. After transformation, the variables have acceptable skewnesses. Table 9 shows the results of the transformation. All statistical analyses, but descriptive analyses, use transformed variables.

TABLE 9. THE SKEWNESS OF RAW AND TRANSFORMED VARIABLES

VARIABLE	MINIMUM	MAXIMUM	RAW SKEWNESS	TRANSFORMED SKEWNESS
FAMINCRA	1.00	3.50	1.92	0.95
UNEMPLRA	0.07	3.50	5.66	0.30
POVERTRA	0.17	1.25	0.55	0.55
WELFARRA	0.13	10.00	5.99	-0.11
UNWEDBRA	0.00	1.00	-0.02	-0.02
ARRESTRA	0.07	5.38	3.73	0.36
DRUGUSRA	0.33	6.67	8.24	0.02
COLGRARA	0.20	40.00	2.47	0.73
COLINCRA	0.75	2.00	1.68	0.74
FAMINCDF	0.00	40000.00	1.46	0.47
UNEMOLDF	-65.00	10.00	-1.82	0.50
POVERTDF	-55.00	10.00	-0.92	-0.92
WELFARDF	-70.00	45.00	-0.53	-0.53
UNWEDBDF	-76.00	0.00	-1.88	0.71
ARRESTDF	-70.00	50.00	0.08	0.08
DRUGUSDF	-48.00	17.00	-1.64	0.40
COLGRADF	-12.00	74.00	1.22	0.34
COLINCDF	-10000.00	40000.00	2.40	0.41
LAZYDF	-60.00	79.00	1.37	0.43
INTEDF	-20.00	50.00	1.71	0.62
DEPEDF	-65.00	40.00	-1.31	0.70

NOTE: THE MINIMUM AND MAXIMUM VALUES OF EACH VARIABLE ARE THE VALUES BEFORE TRANSFORMATION.

THE NUMBER OF VALID CASES FOR EACH VARIABLE RANGES BETWEEN 80 AND 97.

The following are the formula of transformation for each variable (prefix R indicates the variables before transformation):

FAMINCRA=LOG(R_FAMINCRA)
 UNEMOLRA=LOG(R_UNEMPLRA+0.1)
 POVERTRA=R_POVERTRA
 WELFARRA=LOG(R_WELFARRA-0.1)
 UNWEDBRA=R_UNWEDBRA
 ARRESTRRA=LOG(R_ARRESTRRA+0.1)
 DRUGUSRA=LOG(R_DRUGUSRA-0.2)
 COLGRARA=LOG(R_COLGRARA-0.1)
 COLINCRA=LOG(R_COLINCRA-0.5)
 FAMINCDF=LOG(R_FAMINCDF+12000)
 UNEMOLDF=LOG(22-R_UNEMPLDF)
 POVERTDF=R_POVERTDF
 WELFARDF=R_WELFARDF
 UNWEDBDF=LOG(16-R_UNWEDBDF)
 ARRESTDF=R_ARRESTDF
 DRUGUSDF=LOG(36-R_DRUGUSDF)
 COLGRADF=LOG(R_COLGRADF+38)
 COLINCDF=LOG(R_COLINCDF+15000)
 LAZYDF=LOG(R_LAZYDF+300)
 INTEDF=LOG(R_INTEDF+50)
 DEPEDF=LOG(250-R_DEPEDF)

Appendix D. The compositions of attitude scales.

In Kaplowitz's study, three attitudes scales were constructed to reflect people's opposition to affirmative action, their beliefs in the existence of little discrimination, and their positive attitudes towards black personal characters. AFFACT, BELDIS, and BLKPER stand for these three scales respectively. These three scales were constructed by combining respondents' answer to following items:

AFFACT (opposition to affirmative action):

Respondents' opinions on items 1, 2, 3 range from strongly agree to strongly disagree.

1. In their student admission policies, colleges and universities should reserve a certain number of places for blacks and other minorities.
2. In hiring professors, colleges and universities should set aside a certain number of positions for blacks and other minorities.
3. Do you think that management should strongly encourage blacks to apply for top positions?
4. Suppose the firm must choose between a qualified white applicant and a qualified black applicant. Suppose the white applicant seems slightly more qualified. Should they choose the black applicant or the white applicant?
5. Suppose the firm must choose between a qualified black applicant and a qualified white applicant. Suppose the white applicant seems much more qualified. Should they choose the black applicant or the white applicant?

BELDIS (beliefs in the existence of little discrimination):

1. On a scale of 1 to 7, with 1 being very important and 7 being not at all important. please rate how important you think **each** of the following four issues is.

- a) Past job discrimination.
- b) Current job discrimination.
- c) A decrease in the number of good paying factory jobs.
- d) A lack of opportunity for a good education.

2. Suppose a black and a white applicants competing for the same job, please give your judgments about **each** of the following four situations.

- a) Suppose both applicants are qualified but the white applicant is slightly more qualified than the black applicant. Who do you think usually gets the job?

- b) Suppose both applicants are qualified but the white applicant is much more qualified than the black applicant. Who do you think usually gets the job?
- c) Suppose both applicants are qualified but the black applicant is slightly more qualified than the white applicant. Who do you think usually gets the job?
- d) Suppose both applicants are qualified but the black applicant is much more qualified than the white applicant. Who do you think usually gets the job?

Respondents' opinions on following item range from strongly agree to strongly disagree.

- 3. Even today, racial discrimination significantly limits the employment opportunities of blacks.
- 4. Blacks don't seem to use opportunities to operate shops and businesses.
- 5. Many blacks now lose out on jobs and promotions because of their race.

BLKPER (positive attitudes towards blacks' personal characters).

The first part of information for this scale is respondents' opinions on following item, which are ranged from strongly agree to strongly disagree.

- 1. Black don't seem to use opportunities to operate shops and businesses.
- 2. In their student admission policies, colleges and universities should reserve a certain number of places for black and other minorities.
- 3. On the whole, black people do not stress education and training.
- 4. The basic problem faced by blacks is the weakness of the black family structure.

The second part of information is perceived the differences in dependability and laziness of blacks and whites, which are based on following questions:

- 5. Out of every 100 whites how many of them do you think are lazy?
- 6. Out of every 100 blacks how many of them do you think are lazy?
- 7. Out of every 100 whites how many of them do you think are dependable?
- 8. Out of every 100 blacks how many of them do you think are dependable?

References

REFERENCES:

1. Allen, P. T., & G. M. Stephenson (1983). Intergroup Understanding and Size of Organization. British Journal of Industrial Relation, Vol. 21, pp312-29.
2. Bar-Tal, Daniel, & Nehamia Geva (1986). A Cognitive Basis of International Conflicts. pp. 118-133, In "Psychology of Intergroup Relations", edited by Worchel, Stephen, & Austin, William G., Chicago, Nelson-Hal Publishers.
3. Billig, M., & H. Tajfel (1973). Social categorization and Similarity in Intergroup Behavior. European Journal of Social Psychology. Vol. 3, pp. 27-52.
4. Blake, Robert R., & Jane S. Mouton (1961). Group Dynamics: Key to Decision-Making. Houston, Gulf.
5. Bobo, Lawrence (1988). Group Conflict, Prejudice, and the Paradox of Contemporary Racial Attitudes, in "Eliminating Racism: Means and Controversies", Edited By Phyllis A. Katz & Dalmas A. Taylor, New York, Plenum.
6. Brown, Jonathon D., Greg W. Schmidt, & Rebecca L. Collins (1988). Personal involvement and the Evaluation of Group Products. European Journal of Social Psychology, Vol. 18, pp177-79.
7. Emerson, Rupert (1960). From Empire to Nation. Cambridge, Harvard University Press.
8. Fisher, Ronald J. (1990). The Social Psychology of Intergroup and International Conflict resolution. New York, Spring-Verlag.
9. Hyman, H. H., & P. B. Sheatsley (1964). Attitudes toward Desegregation. Scientific American, Vol. 211, No. 1, pp.16-23.
10. Hyman, H. H., & P. B. Sheatsley (1956). Attitudes toward Desegregation. Scientific American, Vol. 195, No. 6, pp.35-39.
11. Jackman, Mary R., & Michael J. Muha (1984). Education and Intergroup Attitudes: Moral Enlightenment, Superficial Democratic Commitment, or Ideological Refinement? American Sociological Review, Vol. 49, pp.751-69.
12. Kelly, Caroline (1990). Social Identity and Intergroup Perception in Minority-Majority Contexts. Human Relations, Vol. 43, No. 6, pp583-99.
13. Kinder, Donald R., & David O. Sears (1981). Prejudice and Politics: Symbolic Racism versus Racial Threats to the Good Life. Journal of Personality and Social Psychology, Vol. 40, pp.414-431.

14. Kluegel, James R., & Eliot R. Smith (1986). Beliefs about Inequality: Americans' Views of What Is and What ought to Be. New York, Aldine De Gruyter.
15. Kluegel, James R. (1990). Trends in Whites' Explanations of the Black-white Gap in socioeconomic Status 1977-1989. American Sociological Review, Vol. 55, pp.512-25.
16. Kluegel, James R., & Eliot R. Smith (1986). Whites' Beliefs about Blacks' Opportunity. American Sociological Review, Vol. 47, pp.518-532.
17. McConahay, John B. (1986). Modern Racism, Ambivalence and the Racism Scale. pp. 91-125 in "Prejudice, Discrimination, and Racism", edited by John F. Dovidio, & Samuel L. Gaertner, Orlando, Academic Press.
18. Patterson, James T. (1986). America's Struggle Against Poverty: 1900-1985. Cambridge, Harvard University Press.
19. Pettigrew, Thomas F. (1985). New Black-white Pattern: How to Best Conceptualize Them? Annual Review of Sociology, Vol. 11, pp.329-346.
20. Platow, Michael J., Charles G. McClintock, & Wim B. G. Liebrand (1990). Prediction Intergroup Fairness and Intergroup Bias in the Minimum Group Paradigm. European Journal of Social Psychology, Vol. 20, pp.221-39.
21. Schaller, Mark (1991). Social categorization and the Formation of Group Stereotype: Further Evidence For Biased information processing in the perception of group-behavior correlations. European Journal of Social Psychology, Vol. 21, pp.25-35.
22. Schuman, Howard, & Lawrence Bobo (1988). Survey-Based Experiments on White Racial Attitudes toward Residential Integration. American Journal of Sociology, Vol. 94, pp. 273-299.
23. Schuman, Howard, Charlotte Steeth, & Lawrence Bobo (1988). Racial Attitudes in America: Trends and Interpretations. Cambridge, Harvard University Press.
24. Sears, David O. (1988). Symbolic Racism. in "Eliminating Racism: Means and Controversies", Edited By Phyllis A. Katz & Dalmis A. Taylor, New York, Plenum.
25. Sherif, M., O. J. Harvey, B. J. White, W. R. Hood, & C. W. Sherif (1961). Intergroup conflict and Cooperation: The Robber's Cave Experiment. Norman, University of Oklahoma Book Exchange.

26. Tajfel, H. (1978). Interindividual Behavior and Intergroup Behavior. In "Differentiation between social group: Studies in the Social Psychology of Intergroup Relations". edited by H. Tajfel. London, Academic Press.
27. Tajfel, H. (1970). Experiments in Intergroup Discrimination. Scientific American, Vol. 223, No. 5, pp.96-102.
28. Tajfel, H., C. Flament, M. Billig, & R. Bundy (1971). Social Categorization and intergroup behavior. European Journal of Social Psychology, Vol. 1, pp.149-178.
29. Taylor, Donald M. & Father M. Moghaddam (1987). Theories of Intergroup Relations: International Social Psychological Perspective. New York, Praeger.
30. Worchel, Stephen, & William G. Austin (1986). Psychology of Intergroup Relation. Chicago, Nelson-Hall Publishers.
31. Federal Investigation Bureau (1991). Crime in the United States: 1990. Washington, D.C.
32. National Center for Health Statistics (1990). Vital Statistics of the United States: 1988. Vol. I, Natality. DHHS, Pub No. (PHS) 90-1100. Public Health Service, Washington, D.C., U.S. Government Printing Office.
33. National Institute on Drug Abuse, U.S. Department of Health and Human Services (1991). National Household Survey on Drug Abuse: Population Estimates 1990. Washington, D.C., Government Printing Office.
34. U.S. Bureau of the Census (1990). Current Population Reports. Series P-60, No. 172. Money Income of Household, Families, and Persons in the United States: 1988 and 1989. Washington, D.C., U.S. Government Printing Office.
35. U.S. Bureau of the Census (1990). Statistical Abstract of the United States (11th Edition). Washington, D.C.

MICHIGAN STATE UNIV. LIBRARIES



31293009024732