

AN ABSTRACT OF THE THESIS OF

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Title: The Relationship between Social Contact and
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The purpose of this study was to investigate the level of social interaction and social distance or comfort among five undergraduate ethnic groups (African Americans, American Indians, Asian Americans, Caucasian Americans, and Hispanic Americans) at Oregon State University. Another purpose was to explore the correlation between the level of social contact and comfort or social distance among the five ethnic groups.

The sample included 284 full time continuing undergraduate students at Oregon State University. The contact scale included items measuring the number of acquaintances, frequency of interaction, positive degree of feeling, number of friends, and duration of contact. The comfort scale was a modified version of Byrnes and Kiger's (1988) Social Scale. It asked respondents to rate from one (very uncomfortable) to seven (very

comfortable) their comfort with people of different ethnicities in six roles as: president of the United States, a counselor, a professor, a small group member in a classroom or group activity, a roommate, or a date.

Two-way analyses of variance provided comparative information about ethnicity and gender. Newman-Keuls tests of significance were also employed. Pearson correlation coefficients were used to investigate the relationship between contact and comfort.

Results of the study showed that students were generally comfortable with all groups, but least comfortable with Asian Americans. As a group, Asian Americans were less comfortable with other groups than were other ethnic groups. Minority groups were most comfortable with their own group. All minority groups except African Americans were significantly more comfortable with Caucasian Americans than with other minority groups.

Correlations between contact and comfort for each group were positive and significant in all but 18 of 60 correlations performed. They were not significant for American Indians as either respondent or target group.

In addition, results showed that there are not as many American Indian students at OSU as was originally thought. Further, students indicated little interaction with American Indians.

The Relationship between Social Contact and
Comfort with Social Interaction among
Student Ethnic Groups at Oregon State University

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THE RELATIONSHIP BETWEEN SOCIAL INTERACTION AND
COMFORT WITH SOCIAL INTERACTION AMONG
STUDENT ETHNIC GROUPS AT OREGON STATE UNIVERSITY

CHAPTER 1

INTRODUCTION

The population of the United States is becoming increasingly diverse. According to pollster Louis Harris (1988),

Over a third of the entire population of this country will be non-White minority by the turn of the century. If population trends continue, it is not inconceivable that close to a majority of the children under 18 will be non-White minority group members. (p. 23)

Changing national demographics are resulting in increased diversity in the ethnic and cultural composition of colleges and universities. In just ten years, from 1978 to 1988, college enrollments for minorities increased by 34.4 percent (Evangelauf, 1990). Increases occurred in every ethnic-gender group except African American males. Asian Americans showed enrollment gains of 111 percent, American Indians of 19 percent, and Hispanic Americans of 63 percent. African American students increased only 7.2 percent, but they are still by far the largest non-white group, with over 1.1 million students. While gaining in numbers, people of color still only comprised 19 percent of the domestic student enrollment in higher education in

1988, up from 16 percent in 1978 (Almanac, 1990). This figure is expected to rise dramatically.

Growing ethnic diversity on college campuses provides students more opportunities to encounter persons of different cultures, who may challenge previous ways of thinking, and bring new perspectives to the campus.

Unfortunately, increased contact with diverse groups also brings potentially volatile situations. In one survey, over 68 percent of university presidents identified race relations as a major problem on college campuses (Boyer, 1990). Part of the volatility stems from the change in how minorities are treated. In the past, it was assumed that minority students would need to adjust to the institution, but "past failures and future demographics say it is time for a change" (Odell & Mock, 1989, p. ix). As more students demand accommodation, Dudley B. Woodard (1990), Vice President for Student Affairs at the University of Arizona, predicts more racial tension.

Many white students resent the change, feeling that minorities are given unfair advantages. Some students are even forming white student unions (Wilson, 1990). Incidents of racial hatred range from disparaging graffiti and racist jokes broadcast over campus radio to the race riot at University of Massachusetts in 1986 (Wiener, 1989). Racial incidents "threaten to divide

campuses in a manner not seen since the decade of the '60s" (McHugh, Dalton, Henley, & Buckner, 1988, p. 5).

Increasing tension and prejudice make the campus unhealthy for all students. Some educators wonder if increased diversity of colleges and universities is working. Does interracial contact lead to lessened hostility and reduced prejudice, as one might suppose? How does interracial contact correlate with racial attitudes?

Such research questions center around the contact hypothesis, which states that under certain conditions, interracial contact will decrease prejudice (Allport, 1954). Research shows that sometimes contact improves relations and sometimes it does not (Amir, 1976; Ray, 1983; Stephan, 1985). Increased racial contact on a southern college campus did "reduce expressions of racial prejudice" (Braddock, 1979 as quoted in Sampson, 1986, p. 172). However, racial attitudes of both Black and white students became more negative after a year of desegregation at Northwestern University. There was little biracial contact. Talley (1981) surmised that these students did not become acquainted because they did little else but attend class together.

Statement of the Problem

It is uncertain whether increased interethnic contact will increase or decrease prejudicial attitudes,

therefore more study is necessary. Much depends on the amount and type of contact. Thus, exploring students' interethnic contact, identifying their comfort level with other ethnic groups, and pinpointing the relationship between contact and comfort level would provide vital information about possible effects of increasing diversity at a university. These were the aims of this study.

Importance of the Study

Many studies of white and Black college students' attitudes have been conducted, but little comparative study has been done with other ethnic groups, particularly Hispanics (White & Sedlacek, 1987). Boyer (1990) encouraged soliciting the opinions of Blacks and Hispanics. The current study, which included perceptions of and about these groups, as well as American Indians and Asian Americans, adds to this area of knowledge.

Changing demographics compel educators to assess the campus climate to better understand and predict the consequences of increasing diversity, and to help design programs to deal with multiculturalism. Some institutions, like Stanford University (1989), the University of Colorado (Hobson-Panico, 1990), and Florida State University (Dalton, 1991) have conducted such studies.

Assessments provide campus educators with baseline data to evaluate programs for dealing with the hostile environment that minorities confront at many predominantly white campuses (McHugh, et al., 1988). Such hostile environments can cause feelings of isolation and alienation, resulting in lower self-esteem and poorer academic achievement among minorities (Armstrong-West & de la Teja, 1988). In addition, some campuses may erupt in violence, because prejudice can lead to "physical attacks" on members of "hated outgroups" (Pettigrew, 1982, p. 22).

Prejudice affects all students. It was one of the top five issues that chief student personnel administrators most often sought to address in values education (Dalton, Barnett & Healy, 1982). Ernest Boyer (1987, 1990) stresses the importance of a global perspective and civility for all students. Stanford University staff asserted, "Student Affairs must support multicultural programming as integral to a complete education for all students" (Kim, Mendoza, Porter, & Woodward, 1989, p. 239).

Tolerance is also specifically important to leadership development (Kuh, Krehbiel, & MacKay, 1988). According to Brunetta Wolfman, Associate Vice President for Academic Affairs at George Washington University, because of resegregation, leadership for a diverse, multicultural nation is not being

taught, experienced, or learned in academe. It could and must be. (1990, p. B1)

In summary, measuring current contact and comfort level at Oregon State University helped establish a baseline to assist these educators and administrators in determining methods to encourage beneficial contact among groups. Including Asian Americans, American Indians, and Hispanics added to the sparse literature on these groups.

Interethnic Group Contact

Many community educational programs designed to change feelings and beliefs are often based on a simple version of what is known as the contact hypothesis - if enough people of various groups interact, more positive attitudes will result (Amir, 1976). Research results, however, show that intergroup contact does not necessarily reduce intergroup tension, and may even increase it (Amir, 1976; Ray, 1983; Stephan, 1985).

As early as 1954, Allport listed 30 different intergroup factors which affected the outcome of interaction. This list has continued to be very useful in research (Hewstone & Brown, 1986). Obviously, so many variables make research exceedingly complex, but four key factors should be present: equal status, cooperative interdependence within the group, support by authority figures, and opportunities to interact with outgroup members as individuals (Stephan & Brigham, 1985).

Although all factors are important, Talley (1981) felt that the intergroup contact itself was crucial. At her campus, students had very little to do with each other, thus they did not interact with outgroup members as individuals. Sampson (1986) contended that a campus is more competitive than cooperative, and he questioned whether students really perceived equal status with outgroup members.

Measuring Prejudice

Instruments traditionally used to measure prejudice are less effective today because public opinion regarding prejudice and discrimination have changed dramatically over the last thirty years. Although the general public has begun to "characterize blatant racism as unlawful and immoral," many avoid contact with other groups and retain negative stereotypes (Byrnes & Kiger, 1988, p. 107). While continuing to feel negatively towards Blacks, whites are less comfortable admitting prejudiced views, even privately (McConahay, 1986; Sedlacek & Brooks, 1970).

A comparison of the three modes of expressing and measuring prejudice (perceptive, affective, and prescriptive) is provided in The Anatomy of Racial Attitudes, by Apostle, Glock, Piazza and Suelzle, (1983).

Perceptive manifestations of prejudice include negative beliefs and stereotypes and "what people

conceive racial differences to be" (Apostle, et al., 1983, p. 10). An example of a prejudiced perception is "Jews are money-hungry." Measuring perceptions or stereotypes is difficult. The perception could be accurate; for example is the belief that "in America, blacks on the average are more likely to get into trouble with the police prejudice or an accurate perception of a fact?" (p. 11-12). Second, beliefs or stereotypes may change, i.e., people now would be offended if asked about derogatory racial stereotypes. Third, although stereotypes may change, the underlying attitude may not be affected; thus, making it difficult to decide whether prejudice has increased or not (Apostle, et al., 1983).

The second mode of expressing prejudice, the affective, includes negative feelings about others, for example, "I don't like Jews." These feelings or attitudes are also difficult to assess, even in the laboratory (Apostle, et al., 1983).

The third level, the prescriptive, is the desire or willingness to "engage in discriminatory behavior" (Apostle, et al., p. 9), such as to say "Chinese shouldn't supervise whites." Prescriptive instruments "ordinarily have greater face validity than perception based measures" (p. 14), i.e., it is easier to differentiate between prejudiced and non-prejudiced responses. Examples include Adorno's Ethnocentrism

Scale, which deals primarily with social policy problems, and the Bogardus Social Distance Scale.

Social Distance Scale

"Social distance" refers to the degree of intimacy desired or tolerated with members of another group (Owen, Eisner, & McFaul, 1981). Social distance research appears to have widespread acceptance. Sociologists have been using the Bogardus Social Distance scale for over sixty years, since Bogardus first developed it in 1925 (Owen, et al., 1981).

The Bogardus Social Distance Scale provides subjects a series of questions designed to determine at what degree of contact they would no longer be comfortable with someone from another group. The scale may be used to survey subjects of any ethnicity, and there is no problem with responding to blatant stereotypes (Apostle, et al., 1983). The original scale is somewhat outdated, and includes items which are not as suitable for college students as for the general public.

The Social Scale, recently developed by Byrnes and Kiger (1988) and based on the Bogardus Social Distance Scale, is directed at whites, but may be adapted for use with other groups. Most of the role situations are common to typical American students. The scale is internally reliable, and has been validated using the Modern Racism Scale (McConahay, 1986), which is a

prescriptive scale that has been highly correlated with blatant expressions of racial prejudice (Sniderman & Tetlock, 1986).

Current Study

The research question for this study was drawn from two major areas: 1) the study of the impact of contact on racial attitudes and 2) social distance research.

The theoretical basis for this study is founded on the contact hypothesis, as defined by several social psychologists, among them Allport (1954), Amir (1978), and Tajfel (1978). To deal with Allport's (1954) list of 30 factors, or even his four most important factors is difficult to do in any one study, therefore, this study concentrated on studying the types of contact students had with other groups, and examined the duration, frequency and variability of those contacts, as Kiger (personal communication, November 10, 1990) suggested were important components.

There were three major purposes in this study. First, it examined Oregon State University students' extent of self reported contact with members of other ethnic groups. This contact component was measured through using a questionnaire based upon one that Stanford University used in its University Committee on Minority Issues study and some questions contained in the Apostle, et al. (1983) study. Second, the current study

examined students' willingness to interact with members of other ethnic groups through using a modified version of the Social Scale (Byrnes and Kiger, 1988). Third, the relationship of contact and comfort or social distance was explored by correlating the contact measure with the comfort measure.

Hypotheses

1. There will be no significant differences among any of the ethnic groups in their reported contact with members of the target groups. (Contact is measured by combining measures for 1) number of friends, 2) number of acquaintances, 3) duration of contact, 4) frequency of contact, and 5) reaction to contact with the group.)

2. There will be no significant differences among any of the ethnic groups in their reported comfort level toward any of the target groups.

3. The greater the respondents' contact score with an ethnic group, the higher the comfort level score on the social scale for that ethnic group.

Definition of Terms

For the purposes of this paper, the following terms are used:

Contact hypothesis - asserts that "interaction between individuals belonging to different groups will reduce ethnic prejudice and intergroup tension" (Hewstone & Brown, 1986, p. 1).

Ethnic prejudice - defined according to Allport (1954):

Ethnic prejudice is an antipathy based upon a faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group as a whole, or toward an individual because he is a member of that group. (p. 9)

Ingroup - refers to the group to which a person belongs.

Outgroup - refers to the group of which a person is not a member.

Minority - refers to a group of individuals who are not of the majority group - any non-white group.

Social distance - refers to the degree of intimacy desired or tolerated with members of another group (Park, 1924).

Target groups - refers to the five ethnic groups about which subjects are asked to respond on the contact scale and the social scale.

CHAPTER 2

LITERATURE REVIEW

The current study is based on the contact hypothesis and social distance research, both of which have extensive research devoted to them. As early as 1922, Emory S. Bogardus' interest in "the race problem" caused him to develop the social distance scale, a measure of a specific behavioral manifestation of prejudice (Owen, Eisner, & McFaul, 1981). In 1954, Gordon Allport wrote The Nature of Prejudice, in which he discussed the contact hypothesis and research concerning prejudice.

Research on contact theory itself is wide-ranging, including work on stereotypes, attributions (Pettigrew, 1979), cooperation versus competition (Sherif, 1953; Cook, 1978), and equal status (Mackenzie, 1948; Pettigrew, 1971; McClendon, 1974; Riordan, 1978). Hewstone and Brown (1986) contrasted the interpersonal approach of Pettigrew and Cook with an intergroup approach. Also, much school desegregation research has been based on the contact hypothesis (Stephan & Rosenfield, 1978; McConahay, 1978; St. John, 1975).

Contact Hypothesis

"In its earliest form the contact hypothesis posited simply that association with persons from a disliked group leads to the growth of liking and respect for that

group" (Hewstone & Brown, 1986, p. 2). It was soon known that such a simple version was a misconception. As early as 1947, Williams believed factors such as intergroup collaboration, superordinate goals, and equal status among individuals were important in changing prejudicial attitudes (Stephan, 1985).

In 1954, Allport (1954) stated,

Prejudice (unless deeply rooted in the character structure of the individual) may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom, or local atmosphere), and provided it is of a sort that leads to the perception of common interests and common humanity between members of the two groups. (p. 281)

Allport (1954) also listed 30 factors relevant in researching and/or decreasing prejudice. While all these factors are still useful today (Hewstone & Brown, 1986), four of these continue to be stressed in the research. These factors are: equal status, cooperative interdependence within the group, support by authority figures, and opportunities to interact with outgroup members as individuals (Stephan & Brigham 1985, p. 2). The contact measures specific to this research which Allport lists under "quantitative aspects" include frequency, duration, number of persons involved, and variety of individuals (Allport, 1954, p. 262).

Research shows that mere contact does not necessarily reduce intergroup tension; in fact, interaction may even increase tension (Amir, 1976; Ray, 1983; Stephan, 1985), especially in conditions of unequal status and high competition. According to Hewstone and Brown (1986), Cook was one of the first to ask, "In what types of contact situations, with what kinds of representatives of the disliked group, will interaction and attitude change of specific types occur - and how will this vary for subjects of differing characteristics?" (Cook, 1962, p. 76).

The Interpersonal Approach

Cook (1978) predicted five conditions must be present to decrease prejudice: 1) equal status within the confines of the contact situation; 2) the characteristics of outgroup members must disconfirm prevailing outgroup stereotypes; 3) the situation must encourage or require cooperation toward a joint goal; 4) the situation enables individuals to know one another as individuals, not as stereotypical group members; and 5) the social norms within and surrounding the contact situation favor "group equality" and "intergroup association" (Cook 1978, p. 97).

The rationale for Cook's five criteria was derived from a theory of interpersonal attraction which implies that individuals realize they share many values with

members of different groups with whom they have interacted. Repeated positive experiences will eventually "neutralize the negative relationship" between the two groups (Hewstone & Brown, 1986, p. 5). An individual is seen as an individual who happens to belong to an outgroup. For people to reconsider their old stereotypes, they must interact with individuals from the outgroup who are atypical.

A major problem with the interpersonal theory is that often ingroup members do not generalize differences from atypical outgroup members to the entire outgroup because they are not seen as "real" outgroup members. Attitudes toward specific individuals may change, but there is "little or no change in attitudes towards outgroups in general" (Hewstone & Brown, 1986, p. 5). The stereotype is so deeply ingrained that the ingroup member may say, "Well you're not like them; you are different, but the rest of the Jews, Blacks, etc. are still ...". The saying "some of my best friends are ... Jews, Blacks, Asians, etc." has become a cliché for ethnic or religious prejudice (Hewstone & Brown, 1986). Allport (1954) called this "re-fencing" because people carefully "re-fenced" their categories (p. 23). The stereotype remains intact, because the "exception proves the rule."

The Intergroup Approach

Hewstone and Brown (1986) found the newer intergroup perspective based on the work of Tajfel (1978) much more useful in decreasing prejudice. In this approach, people have a more "social" than "personal" identity. Both outgroup and ingroup members are seen stereotypically.

Thus, intergroup behaviour is more uniform both within the group and towards outgroups because individuals develop their attitudes and actions on the basis of those common group attributes.... Both interpersonal and intergroup behaviour are the actions of individuals, but in one case they are the actions of individuals qua individuals, while in the other they are actions of individuals qua group members. (Hewstone & Brown, 1986, p. 14)

To decrease prejudice using this perspective, the outgroup members must be seen as typical of the group. If the outgroup member is seen as atypical, outside the stereotype and as an automatic "exception to the rule," the ingroup would be less likely to generalize the behavior to that of the whole outgroup. If the outgroup member is seen as typical, then the ingroup is more likely to generalize other characteristics to the whole outgroup. Recent research using non-ethnic groups supports this intergroup approach (Wilder, 1984; Weber & Crocker, 1983). Thus, it becomes important to make group affiliations more obvious so that people see one another as typical representatives of their groups. Hewstone and Brown (1986) summarize:

it seems that as long as individuals are acting as individuals, there is no basis either for

expecting any attitude change to be generalized throughout the group or for one person to extrapolate the positive attitudes towards one individual to other outgroup members... All we can expect, if the contact remains on an interpersonal basis is that a few personal relationships will change, but the intergroup situation will remain unaltered. (p. 19)

The distinction between intergroup and interpersonal approaches may not be so absolute. Rothbart and John (1985) pointed out that people belong simultaneously to several broad categories, such as ethnicity, gender, and occupation. Male and female subjects categorized people differently when judging men and women in the same occupation (Park & Rothbart, 1982). Same-sex subjects (ingroup members) tended to rely on occupational information, and opposite-sex subjects (outgroup members) relied more on gender information. These levels of categorization are important especially in ethnic and gender issues.

Whether an intergroup or interpersonal approach is preferred, proponents of both approaches agree that stereotypes must be invalidated in order to decrease prejudice or encourage a willingness to interact with other groups. To accomplish this, it is important to consider such aspects as: 1) the type of interaction among the individuals or groups; 2) how many people are involved; 3) how positive, how frequent, and how long is the interaction; and 4) how much variety is there among

both ingroup and outgroup members (Allport, 1954; Stephan, 1985).

Social Distance Research

Robert Park and Ernest Burgess believed people are conscious of the amount of intimacy they feel in all personal relationships. Believing this awareness could be measured, Park coined the term "social distance" to describe it (Park, 1924, p. 339). He used "class" and "race consciousness" to refer to states of mind in which individuals become aware of the distances that separate or seem to separate them from other classes and races. This consciousness may cause people to be more reserved when they may otherwise be intimate and understanding. In Park's example, the cook and the "lady of the house" may be on intimate terms as long as the cook maintains the "proper distance."

As long as the proper distance is preserved, everyone is capable of getting along with everyone else, but when "social status is menaced," prejudice arises.

[Prejudice is] seeking to preserve the social order and social distances upon which that order rests One purpose of racial study is to measure not our prejudices, but the vaguer, subtler taboos and inhibitions which persist. (Park, 1924, p. 344)

In 1925, Emory Bogardus developed a scale to measure social distance. It is now generally known as the Bogardus Social Distance Scale. In the original version

respondents rated how willing they were to admit members of 30 ethnic groups to the following classifications:

1. to close kinship by marriage;
2. to my club as personal chums;
3. to my street as neighbors;
4. to employment in my occupation;
5. to citizenship in my country;
6. as visitors only to my country; and
7. would exclude from my country;

The wording was updated (Bogardus, 1967), but the scale used today is basically the same as the original.

The social distance score is found by determining the mean of the lowest response number selected for each group by the respondents. For example, selecting a "3" would mean the subject would accept another as a neighbor. A low social distance score means one is willing to have more contacts and a closer relationship. A high social distance score means one is willing only to have less intimate contact (Bogardus, 1925).

Bogardus Studies

The Bogardus Social Distance Scale is one of the oldest and most used measures of social attitudes, and the most frequently cited illustration of attitude measurement in social psychology texts (Neumeyer, 1974). The scale is not specific to any one ethnic group and it has been used in many different settings and cultures

(van der Berghe, 1962; Sell, 1987; Pass, 1987; O'Driscoll, Haque, & Ohsako, 1983).

Bogardus conducted four nationwide surveys of racial social distance from 30 ethnic groups in 1926, 1946, 1956, and 1966. The cross-sectional series included over 8,000 students and encompassed 40 years. The respondents were from middle-class backgrounds, ranged in age from 19 to 26, and were all enrolled in sociology or related courses (Bogardus, 1968). Over 24 colleges and universities were involved each year, and the study was expanded to 36 institutions in 1966. In 1977, Owen, Eisner, and McFaul (1981) continued the traditional 10 year study, surveying 1488 students from 12 colleges and universities in a similar geographical distribution.

Bogardus found that people were more willing to interact with those similar to themselves, and thus they give such groups a low social distance score. This tendency to be more willing to interact with groups similar to oneself appears to extend across cultures (Bogardus, 1967, 1968; Sinha & Upadhyaya, 1962; Schaefer, 1987; Sell, 1987).

Because of the tendency to be most comfortable with one's own group and because the majority of respondents were of Northern European descent (Bogardus, 1967), it was not surprising that Bogardus' subjects ranked White Americans and Northern Europeans highest. In the middle

third were the Eastern and Southern Europeans, and generally near the bottom were such racial minorities as American Indians and Blacks.

Social distance scores showed the absolute level of expressed prejudice has declined somewhat, but still remains at approximately "2," which means people are willing to admit others to their "personal club." The distance between the highest mean social distance score assigned a group and the lowest such score decreased significantly from 2.85 in 1928 to 1.55 in 1966, and again to 1.37 in 1977. In 1928, only 10 percent of white native born Americans were willing to marry Southern or Eastern Europeans, and only one percent were willing to marry Negroes (Bogardus, 1928). By 1967, people were significantly more willing to interact with most of the 30 groups studied.

Groups in the lower end of the hierarchy where minority groups were clustered were affected most by the declining social distance. Blacks moved from the lower third to the middle third of the hierarchy for the first time. After staying at the bottom of the middle sector for 40 years, Native Americans jumped to tenth place at the bottom of the top sector (Owen, et al., 1981).

Bogardus (1967) felt that his 40-year study could be reviewed "to see whether changes in racial reactions have been affected by public affairs," such as war (p. 3).

The rank ordering of the groups has remained relatively stable, although some of the target groups, such as the Japanese and Russians, did change positions due to World War II and the Cold War. The trend toward lower social distance would have been more pronounced, but events such as the Depression and World War II prevented it.

Bogardus (1967) predicted the decline in distances would continue, but at a slower rate.

National polls also show prejudice is decreasing (Smith & Dempsey, 1983) and that social distance has decreased (Schuman, Steeh, & Bobo, 1985). However, some researchers have questioned this downward trend (Crull & Bruton, 1985). Payne, et al. (1974) noted that there was actually little difference in social distance scores in Bogardus' studies until the decade between 1956 and 1966. In the 1966 study, Bogardus had even noted that the greater number of Black students responding in the later study had naturally "lowered somewhat" the total distance score received by that group (Bogardus, 1967, p. 14).

Crull and Bruton (1985) found Owen et al.'s (1981) analysis misleading, because it was apparently based on comparing the overall social distance mean and overall spread for the 30 target group means. The large decreases in social distance toward African Americans and Native Americans (Crull & Bruton, 1985) led to a greater difference in overall scores.

A decrease in social distance scores occurred for only seven of the thirty groups to which their subjects responded. Twenty-two of the thirty groups averaged higher social distance scores in 1977 than in 1966 and fifteen averaged higher than in 1956! (p. 57)

The trend toward increased tolerance which Bogardus (1967) predicted needs more examination.

Other Social Distance Studies

Students surveyed in 1975 and 1984 at a major midwestern university were more willing to interact with Blacks, but were less willing overall to interact with other groups than were Bogardus' 1956 and 1966 subjects (Crull & Bruton, 1979, 1985).

Another series of cross-sectional studies conducted at four colleges in Georgia (Gray & Thompson, 1953, Fagan & O'Neill, 1965; Payne, York & Fagan, 1974) showed little difference in social distance scores between 1965 and 1971. Students in 1965 were more willing to interact with most other groups than those in 1953, but were less willing to interact with Cubans and "Negroes" (Fagan & O'Neill, 1965). The increase in social distance toward Blacks "did not indicate an increase in prejudice, but rather a more realistic response" (Fagan & O'Neill, 1965, p. 290).

It is possible that in 1953, ratings were made with much more certainty that Negroes would not be neighbors or schoolmates or social equals. In the present study, the ratings represent realistic appraisals of events. (p. 289)

In 1954, Brown vs. the Board of Education made segregation of schools illegal. During the mid-1960s, the civil rights movement was active in the South, and many white students may have reacted differently knowing they were much more likely to be interacting with Blacks than were their counterparts in 1953. Students in 1953 could afford to say they would be willing to interact with Blacks, because they knew it would not really happen.

Social Distance Studies Compared by Ethnic Background

The majority of social distance studies have been conducted with African American and Caucasian subjects. Less is known about the social distance attitudes of other ethnic groups.

Dyer, Vedlitz, and Worchel (1989) were interested in how accepting minorities are of other minorities and the majority group, and in how minority attitudes compare with those of the majority group. They discussed three ways a minority group could react toward other minority groups.

First, members of minority groups could be "prejudiced against members of all other outgroups, whether minority or majority" (Dyer, et al., 1989, p. 608). This hypothesis is based on social identity theory (Tajfel & Turner, 1986), which states that people identify with their ingroup to enhance their own esteem

(ingroup favoritism). They would attempt to maintain distance from groups they perceive negatively (Dyer, et al., 1989).

Second, the minority group could adopt the prejudices held by the majority group, viewing the majority group positively and other minority groups negatively. This hypothesis is based on a number of theories. Social learning theorists would explain that people imitate the behaviors and attitudes of powerful models, in this case the majority culture. Proponents of the frustration-aggression approach would explain that minorities displace their aggression onto other minorities because they are safer and weaker targets than majority group members. Finally, attributional theorists may view minorities as "blaming the victim," so that weak people are seen as causing their own problems, and therefore worthy victims of discrimination (Dyer, et al., 1989).

The third hypothesis, which is based on Heider's (1958) balance theory, states that minority groups which experience prejudice and discrimination should be attracted to one another and reject the majority group. This explanation also forms the theoretical basis for coalition formation (Dyer, et. al., 1989).

Reviewing social distance research which discusses the responses by ethnic group would be helpful in

determining which of these three hypotheses has most support. Social distance research based on the Bogardus Scale seems to support the first or third hypothesis, that minorities reject the majority group.

Blacks rank ordered the 30 groups differently than whites (Fagan & O'Neill, 1965; Payne, et al., 1974; Schaefer, 1987). Black students felt greater social distance toward some of the European groups, but less distance towards "several groups of mixed ancestry or darker complexions," such as Indians, Spanish, Italians, Mexicans, American Indians, and Filipinos than white students (Schaefer, 1987, p. 31).

Blacks reported less willingness to interact with those 30 largely white ethnic groups than did white respondents (Gray & Thompson, 1953; Payne, York, & Fagan, 1974; Schaefer, 1987). Blacks were the least willing to interact, Asian Americans were somewhat more willing to interact, and whites were the most accepting in the Owen, et al. (1981) study. Blacks also reported higher social distance scores than whites, Mexican Americans and Asians in a community college study conducted in the South (Rapp, 1982).

At first glance, these results may suggest that Asian and African Americans are less willing to interact with other groups than are Caucasian Americans. However, their answers are undoubtedly a function of the bias of

the Bogardus Scale. Over half of the 30 groups listed on the questionnaire are of European descent and 29 of the 30 Bogardus groups are white. It is understandable, then that the Asian and African Americans would answer with higher overall distance scores than would Caucasian Americans who are descendants of those groups. Schaefer (1987) points out that Black subjects must respond to racial as well as cultural differences, and racial barriers are harder to overcome.

Actually, studies using the Bogardus Social Distance Scale do not provide much evidence for or against the hypotheses as outlined by Dyer, et al. (1989), although many of the researchers using the scale do conclude that African Americans are "more prejudiced" than white respondents. The scores on the scale do not show that African Americans reject the 30 groups, merely that they are not as accepting of other groups as are other subjects. Since the studies did not report the scores for the respondents by ethnic group, it is not known exactly how minorities rank Caucasian Americans in relation to American minorities. All that is known from those studies is that people tend to give closer scores to those similar to themselves. Therefore, it cannot be concluded from these studies that whites are more accepting of other groups (in general) than are African or Asian Americans.

Studies using the Bogardus scale do not yield as much information as those employing instruments which ask specific questions or which measure a level of comfort for particular situations. When using other social distance scales, more information is available.

Studies using the Situational Attitude Scale show that whites are less comfortable with minority groups. White students reported more negative attitudes toward Blacks in situations involving close and sustained personal contact than in situations involving less personal contact (Minatoya & Sedlacek, 1984; Sedlacek, Brooks, & Mindus, 1973; Sedlacek & Brooks, 1976; Triandis & Davis, 1965). White students had more negative feelings, particularly in close social situations, when Blacks and Hispanics were mentioned than when no race was given. When asked how they felt about a friend being engaged, whites felt significantly more negative toward Blacks than toward Hispanics (White & Sedlacek, 1987).

In contrast, Blacks were found to accept whites and to want less distance from them in two studies employing data from the 1980, 1982, 1984 and 1985 National Opinion Research Center General Social Surveys. These surveys included specific questions about interracial marriage, school segregation and interracial socializing in the home (Wilson, 1986; Tuch, 1988).

Results were similar at a small private liberal arts college where Blacks made up three to five percent of the population (McClelland & Auster, 1990). All 20 Blacks sampled were willing to be roommates or date whites, but fewer whites were willing to be as close with Blacks. While 80 percent of Blacks would become seriously involved and 60 percent would marry a white, respective percentages for whites toward Blacks were 27 and 21 percent. In addition, white students were much more willing to consider interracial dating or marriage than actually to say they would do it. McClelland and Auster state:

The key here is not the absolute level of intimacy that members of a given race find acceptable; rather, it is the existence of different levels of acceptability between races. (p. 626)

Although they only surveyed whites and Blacks, the studies of Wilson (1986), Tuch (1988), and McClelland and Auster (1990) provide some evidence contrary to Dyer et al.'s (1989) first and third hypotheses, both of which predict that minorities will reject the majority group. In addition, Mexican Americans and Blacks had more positive attitudes interacting with Anglos than vice-versa (Dyer, et al., 1989).

However, none of these studies other than the Dyer et al. (1989) one provides information about minority group attitudes toward other minorities. In an effort to

discover how to answer their hypotheses about minority attitudes toward other minority groups, Dyer, et al. (1989) conducted a study using a more definitive scale than Bogardus' to survey minority groups. This telephone survey of 249 Blacks, 256 Mexican Americans and 708 whites from the general population in Texas in 1986 contained nine social distance questions ranging from attitudes regarding marriage to swimming together to having children in the same school. Respondents ranked each question on a scale of -2 (reject somewhat) to +2 (accept completely). Each of the nine items was scored separately for each of the three respondent groups. Although few respondents expressed strong negative feelings,

in general blacks and Mexican Americans are more accepting of Anglos than they are of each other. Further, in most cases, Anglos are more accepting of Mexican Americans than are blacks. This suggests that the social distance kept between the two minority groups is greater than that kept between each minority and the majority Anglo group. The notable exception involves marriage. (Dyer, et al., 1989, p. 611)

Whites felt that all contact except marriage with other groups was acceptable. Both minority groups found Anglos more acceptable marriage partners than each other, but each minority group was more accepting of marriage with the other minority group than Anglos were. These general results remained the same when age, education and income were taken into account. The most accepting age groups

were the 30-44 and the 18-29 year olds. Lower socio-economic groups were generally less accepting and people with more education were more accepting.

Because the two minority groups in the Dyer et al. (1989) study generally were more accepting of the majority group than the other minority group, the last hypothesis - that minorities will be attracted to each other and reject the majority group - was not supported. Because the groups were generally all accepting of each other, the first hypothesis was not supported either. Thus the Dyer et al. (1989) study supported the second hypothesis, that minority groups generally take on the prejudices of majority groups, accepting majority groups over other minorities.

More evidence to disprove Dyer et al.'s first and third hypothesis, which state that minorities will reject majority groups, was found at University of Colorado at Boulder. As part of a study on campus diversity, students were asked how comfortable they were interacting with students from five ethnic groups (Asian, Black, Hispanic, Native American, and white).

Minorities, especially blacks are somewhat less comfortable with white faculty staff, and students. But even among blacks, more than two-thirds said they feel comfortable with whites. More than 80% from each group feel comfortable with minority faculty, staff and students not of their own ethnicity. Asians report being least comfortable with students from other minority groups. (Hobson-Panico, 1990, p. 7)

Native Americans held opinions between those of Blacks and whites. Thus, those minority students did not reject whites, nor did most of them reject other minority groups. Unfortunately, not enough comparative information was provided to determine how students felt toward whites in relation to minority groups.

Summary of Social Distance Studies

To summarize, some evidence shows that students in general have become more accepting of other groups (Bogardus, 1967, Owen et al., 1981); but some conflicting evidence remains (Payne, York, & Fagan, 1974; Crull & Bruton, 1985).

Some research shows whites are more accepting of the Bogardus groups than minority groups (Owen et al., 1981, Rapp, 1982; Schaefer, 1987), but other studies show that whites are not as comfortable with Blacks as Blacks are with whites (Wilson, 1986; Tuch, 1988). Whites feel more comfortable with Hispanics than with African Americans (White & Sedlacek, 1987; Dyer, Vedlitz & Worchel, 1989).

In comparing minority opinions about minority groups, some investigations have concluded that minorities reject the majority group but they offer little specific information about how minorities view other minority groups (Owen, et al., 1981; Gray & Thompson, 1953; Fagan & O'Neill, 1965; Payne et al., 1974; Schaefer, 1987). Other research showed that

minorities do accept the majority (Wilson, 1986; Tuch, 1988) and that they are more comfortable with the majority than they are with other minorities (Dyer et al., 1989; Hobson-Panico, 1990).

Interethnic Contact and Social Distance or Racial Attitudes Studies

Because the current study concerned university students, this review will be largely limited to studies of college students.

Florida State University conducted a survey of self-reported contact between Black and white students, but comfort level between the groups was not included. Blacks were more likely to have contact with whites than vice versa. Over 75 percent of the Black students reported that they had the most contact with whites in class. White women had most contact in their residences, with classes listed second. At least one third of each group reported the most interethnic contact in housing (Dalton, 1991).

In an extensive study, Stanford University (1989) asked all five groups (Black, Asian, American Indian, Mexican American, and white) about interethnic contact among other items. "Virtually all students" had at least some acquaintances at Stanford who were of another ethnic group.

The patterns [of friendship and acquaintances] also reflected the affinity that members of each group had for their own group... Blacks in particular seemed to make a special effort to associate with members of their own race. (p. 168).

Over 50 percent of whites, about 75 percent of Blacks and Asians, and about 90 percent of American Indians and Hispanics had dated outside their ethnic group. Fewer people had American Indian acquaintances or friends than among the other five groups.

Over 90 percent of Stanford students were "quite" or "very" comfortable interacting with those of other ethnic groups. Minority students were also asked if they "felt as comfortable with whites as with members of their own groups" (p. 168). Over 80 percent of Asians and Mexican Americans, and about 70 percent of American Indians and Blacks agreed "strongly" or "somewhat strongly" that they did.

The Stanford (1989) survey also asked students if they felt that their experience at Stanford had "improved their ability to interact comfortably with people of different racial/ethnic groups." There was a wide range of opinion, with 60 percent of American Indians agreeing that it had improved "a great deal" or "quite a bit." The responses from the other groups to this question were more evenly distributed along the continuum of improvement.

Bogardus (1967) suggested that those who had previous contact with the ethnic groups listed on his scale reported lower social distance scores. Dyer et al. (1989), claimed those with higher education and income had more contact with minority members, and that this led to their greater willingness to interact with members of other groups. However, as discussed in the previous section devoted to the contact hypothesis, research has shown that increased contact with other groups does not always lead to decreased prejudice or lowered social distance toward those groups.

Ray (1983) noted that in the United States increased contact was thought to correct negative stereotypes and lead to greater tolerance, but in Britain, Australia, and South Africa, contact was often thought to increase prejudice. He found no support for either version in his Australian study and suggested that it was too simplistic to state that contact increases or decreases prejudice.

A study of group of 383 mostly young middle-class students from a variety of ethnic groups in South Africa reported that higher social contact did lead to greater willingness to interact with other groups (van der Berghe, 1962). However, he felt that low contact was not a good indicator of greater unwillingness to interact, because "many relatively unprejudiced persons" have no opportunity for interethnic contacts (p. 69).

White South African academicians who worked with Black colleagues were more tolerant toward Black South Africans than those who worked only with other white academicians (Spangenberg & Nel, 1983). The researchers concluded that equal status contact was necessary to improve intergroup attitudes.

More frequent contact between American and Chinese students did not diminish Chinese prejudice toward Americans (Li & Yu, 1974). However, Egyptian students who had lived outside Egypt were more willing to interact with people from other nations than students who had not lived abroad (Sell, 1987).

O'Driscoll et al. (1983) did not find an overall correlation between contact and intergroup attitudes among Australian, Japanese and Pakistani students. However, Australian and Japanese students who had greater knowledge of and contact with each other were more accepting of each other than were their countrymen who scored lower in the contact/information measure. The contact measure consisted of three major items. Students were asked whether they had "lived in the country of the target group, visited that country, heard about (through friends, relatives, or the mass media) or met a person from that country. A point was scored for each item checked" (p. 165). Next, they estimated frequency on a scale of 1-4 by asking how often students

had heard or had read about the target country. The third item encompassing personal contacts asked whether students had any relatives, friends or acquaintances who belonged to the target group. These three items: type of contact, frequency of contact, and personal contacts were combined to form a single score. Obviously, hearing about the country and living in or visiting the country would result in vastly different levels of understanding of that culture. The contact items were not equally weighted and did not capture well the differences in contact. An analysis of the separate items would have been useful for research. Although O'Driscoll et al. (1983) admitted that the process did "not allow for ... differential item weights," they stated, "the efficacy of weighting the relative contribution of each item to an S's overall contact score... has yet to be demonstrated," because "the contribution of that item may vary across respondents" (p. 165).

Contact Studies in the United States

Bogardus (1967) noted that "social contacts may be few" and "little communication of a constructive kind takes place" among people of color and other United States citizens (p. 40). He suggested that those who were more willing to interact with other groups on the scale had had previous contact with those ethnic groups. He felt that because men had more racial contacts, they

would report lower social distance scores than women. Beginning in the 1960s, when women had more opportunity for contact because of increased involvement in business and public affairs, women became more willing to interact with other groups. Bogardus predicted that if women continued to have more opportunities for interracial contact, the difference in scores between men and women would "largely disappear" (1967, p. 34). In fact, recent studies show that women's social distance scores were lower than those of men (Crull & Bruton, 1979, 1985; Robinson, 1987).

In examining prejudice and social distance in several American cities, Pinkney (1961) found a positive relationship between intergroup contact and decreased prejudice. "If the contact develops into interaction, the prejudice is likely to be further reduced" (p. 2908).

Apostle, Glock, Piazza and Suelzle (1983) included a contact measure in their extensive racial attitude survey of whites in the San Francisco Bay area. The researchers were primarily interested in the explanations whites gave for Blacks being economically disadvantaged. Contact was a minor portion of the analysis. They categorized contact into a subjective component defined by numbers of acquaintances and friends, as well as a behavioral component which asked how often subjects entertained and were entertained by Blacks. Apostle et al. (1983) found

the effect of interracial contact on attitudes was "not strong" when people's explanations were controlled.

Students who reported contact with certain groups had lower social distance scores (Crull & Bruton, 1979). A later study (Crull & Bruton, 1985) using a refined contact measure asked students to categorize on one scale their contact with a variety of groups as favorable or unfavorable and as close or not close. Unfortunately, "close" was not fully defined. In addition, scores of students who reported no contact were not reported in the article. Those who reported positive contact, whether close or not, were more likely to be willing to interact with other groups. Surprisingly, students who reported close unfavorable contact were not more likely to report the most rejecting attitudes. Those reporting the greatest social distance were more likely to report unfavorable but not close contact. "Apparently students do not necessarily generalize from very negative personal contacts to form negative stereotypes of social groups" (Crull & Bruton, 1985, p. 59).

The same refined contact scale (Crull & Bruton, 1985) and the Bogardus Social Distance Scale were employed at Iowa State University with 784 residence hall students, of whom 109 were racial minorities and 56 were international students (Robinson, 1987). Students who had had favorable contact were generally more tolerant

than students with no contact or unfavorable contact. Students who had had no contact with various groups, including ethnic groups, were more tolerant than students who had had negative contact.

The Crull and Bruton (1985) contact scale provided no detailed information about the types of contact people have had, nor did it provide information about how varied the contact with a group might have been. In addition, "close" and "favorable" were not operationally defined. Thus, it was conceivable that one person could have limited "close" to mean a friendship, whereas others may have included a coworker or neighbor in their definition.

Desegregation Studies

Many racial-attitude studies were conducted in desegregated elementary and high schools by researchers who were interested in whether the increased contact in these schools brought about better racial relations (Stephan & Rosenfield, 1978). Many of these studies inferred increased contact because students were in desegregated schools; however, these investigations did not include contact measures. Sampson (1986) cited Scott's (1979) review of studies which showed positive results on racial attitudes. St. John (1975) reviewed 23 studies, some of which showed mixed findings. The rest were about evenly split between positive and negative effects of contact on prejudice. It was more common to

find that increased contact led to less prejudice in research on younger students. Studies on high school students were more likely to show that increased contact led to more prejudice. McConahay (1978) pointed out that most of the studies reviewed by St. John (1975) were flawed methodologically. He was unable to find one true experiment and only two quasi experiments in the group.

Few studies on the effects of desegregation or diversity at the university level have been conducted. Braddock (1979, as cited in Sampson, 1986, p. 172) found that increased contact on a southern college campus did reduce expressions of racial prejudice.

Cross-sectional social distance surveys of white under-graduates were conducted in 1963, when desegregation took place, every three years until 1972, and in 1982 and 1988 at the Tuscaloosa campus of the University of Alabama (Muir, 1989). Although there was a reversal in the social acceptance of Blacks in 1982, the research showed an increasing acceptance of Black students.

The 1988 data indicate significantly greater acceptance of eating with, rooming with, double dating, and dating of 'blacks'... Willingness to date 'blacks,' while again increasing, remains well below the 1972 level. (Muir, 1989, p. 84)

Data from both the 1982 and 1988 studies showed that seniors were more accepting of Blacks than were freshmen. This is "consistent with the widely held belief that

University life is liberalizing" (Muir & McGlamery, 1984, p. 965).

Black and white freshmen at Northwestern University were surveyed in the fall of 1979 and again in the spring of 1980. At the time, racial minorities made up less than 10 percent of the student population at Northwestern. At the beginning of their first year, Blacks longed for an ideal situation but realistically expected negative racial interaction. On the other hand, whites believed that the two groups would get along quite well. At the end of the freshman year, both groups had lower racial expectations, but their attitudes about how racial groups ought to interact had not changed much. Students' perceptions of the actual interaction patterns fell far short of their expectations (Talley, 1981). "Racial attitudes became increasingly negative for both black and white respondents" (p. 181).

Although at first glance this study could be seen as disconfirming the contact hypothesis, Talley (1981) offered some explanation for the results, based on Allport's (1954) criteria. First, an academic year may not be long enough for prolonged contact. Second there did not appear to be much "biracial contact" on campus; lunch tables and intramural teams were either all Black or all white. Third, she was not sure that Blacks and

whites saw themselves as equal, either in terms of social class or academic ability.

In the wake of the race riots of the late 1960s, Sayler (1969) was interested in how to affect the racial attitudes of teacher education students at the University of Washington. Fifty students tutored Black high school students for eight weeks, for a total of approximately ten hours, while another group of 53 students tutored white students. An additional 174 teacher education students did no tutoring. Those who tutored the Black students tended to be somewhat less prejudiced on a social distance measure of the Multifactor Racial Attitude Inventory. Sayler concluded that ten hours over eight weeks was not enough to significantly influence prejudicial attitudes and recommended that other types of interracial contact be investigated.

In an extensive look at interracial contact (including friendships and acquaintances), Jackman and Crane (1986) examined racial and policy beliefs, feelings, and social dispositions using data from a survey administered to 1914 respondents in the fall of 1975 by the Survey Research Center at The University of Michigan. Having a variety of interracial contacts was more important than having intimate interracial relationships to positively influence racial attitudes of whites. In addition, "racial attitudes are more positive

when black friends have higher socioeconomic status than when they have equal status" (p. 480). Their conclusions are somewhat discouraging:

The lack of necessity for highly intimate contacts across racial lines is a plus, but the importance of experiencing a variety of interracial contacts is a serious drawback, since most whites who do have contact with blacks experience only token contact. Even more discouraging is the apparently critical significance of the relative socioeconomic status of black contacts. It appears that unless an increase in interracial contact is accompanied by wide-scale change in the relative socioeconomic position of blacks, it is unlikely to have a salutary effect on whites' racial policy views. (p. 480)

Thus, social status, variety, and proximity are important in determining interracial friendships for whites.

Summary

Opinions and attitudes of whites toward other groups have been more frequently studied than the attitudes of people of color. More studies have been conducted with African American students than with other non-white groups. Generally these studies have shown that people were more willing to interact with those similar to their own group, but they did accept other groups. Indeed, there is a national trend toward increasing willingness to interact with those of other groups (Smith & Dempsey, 1983; Schuman, et al., 1985).

Studies discussed in this review show that in general, Blacks rate the predominantly white groups from

the Bogardus Scale less positively than do white subjects (Owen, et al., 1981; Payne et al, 1974; Schaefer, 1987). Blacks and Mexican Americans view whites more positively than whites view Blacks or Mexican Americans (Dyer, et al., 1989). In addition, whites view Hispanics more positively than Blacks (White & Sedlacek, 1987). However, few studies have asked other minority groups about their comfort level or social distance toward other minority groups (Dyer, et al., 1989).

Studies exploring the relationship between interracial contact and social distance show partial support of the contact hypothesis, depending upon the type of contact people have with others. Favorable contact under conditions of equal status for a sufficient length of time with a variety of people will result in people being more willing to interact with those of other groups (Stephan, 1985).

The current study examined further the types of interracial contact university students have had and correlated their contact to their comfort in interacting with those groups. Because variety of interracial contacts is thought to be one of the most important aspects of interracial contact (Jackman & Crane, 1986), its importance influenced this research. Thus, aspects of contact believed to be important (frequency of contact, duration of contact, and number of acquaintances

and friends) in the research (Allport, 1954; Stephan, 1985) were included in the present study.

CHAPTER 3

METHODOLOGY

This study had three major purposes. The first was to investigate the degree of contact among five ethnic student groups: African Americans, American Indians, Asian Americans, Caucasian Americans, and Hispanic Americans. The second was to examine the social distance or comfort students felt toward those groups. A third purpose was to examine the relationship between contact and comfort.

Contact was determined by a scale developed by modifying survey questions from studies conducted at Stanford University (1989) and by Apostle, Glock, Piazza, and Suelzle (1983). The degree of social distance or comfort was measured by a modified version of the Social Scale (Byrnes & Kiger, 1988).

This chapter describes the development and distribution of the survey instrument, the subjects of the study, and the statistical procedures which were used to analyze the data.

Development of the Survey

Pilot Study

A pilot study (Appendix A) was conducted during fall term 1990, to determine the usefulness of the questions

for the final study and to conduct a test retest of the contact scale.

The survey was distributed to a class in personal development offered through the Educational Opportunities Program. Eleven students representing several different racial groups completed the survey. It was also administered to a transfer orientation course consisting of nine students from three ethnic groups. Three weeks later, the students completed the survey again, so that results from the two administrations of the contact portion of the survey could be compared for test-retest reliability. T tests comparing items on the contact measure revealed no significant differences at the .05 alpha level.

Some items on both scales were changed after the pilot study because of student responses. These are outlined below.

Contact Scale

The instrument used to measure the variability of contact consisted of five components: 1) number of acquaintances, 2) number of friends (closeness), 3) duration of contact, 4) frequency of contact, and 5) reaction to the contact.

To determine the number of acquaintances students had, subjects were asked to indicate how many people they knew well enough to say "hi" to in any one group. For

the pilot test, people wrote in numbers, but for the final study, students were asked to choose from categories of: "none," "one to five," "six to ten," and "more than ten." The Stanford study asked simply if they had acquaintances who were members of the various groups.

Closeness of contact was measured by asking the number of friends in each ethnic group. Stanford University had asked if students had any friends in each of those groups.

Duration of contact was determined by asking how long respondents had known the "person they knew best" in any one group. Apostle et al. (1983) had asked how long they had known their "closest black friend." The present wording was used because people may not have friends in some ethnic groups, but they may have known some people long enough to have developed opinions which may have been generalized to the entire racial/ethnic group. For the pilot study, respondents were offered three categories: "less than six months," "between six months and a year," and "over a year." A fourth response, "doesn't apply," was added to the final survey.

In the pilot study, frequency of contact was measured by asking how often subjects saw the person they knew best from a particular group. This item was modified for the final study when one student reported that he saw one Asian American friend only once a year,

but saw other Asian Americans more often. Since this research was more concerned with actual frequency of contact with any members of the group than with any one person, the question was changed to ask students how often they "talk to or do an activity with anyone" from each group for more than 15 minutes. Categories given were: "once a day," "once a week," "once a month," "rarely," and "doesn't apply."

The reaction to contact was measured by a five point Likert-type scale which asked students if their association with members of the five groups (past and present) had been or was "very positive," "somewhat positive," "neutral," "somewhat negative," or "very negative." A "doesn't apply" response was added after the pilot study.

Comfort Scale

The social distance approach was used because it deals with behaviors, and the "best predictors of behavior are questions regarding specific behaviors" (Dyer et al. 1989, p. 609). A modified version of the Social Scale (Byrnes & Kiger, 1988) was developed to measure the willingness of undergraduate students to interact with five ethnic groups: American Indian, African Americans, Asian Americans, Caucasian Americans, and Hispanic Americans.

Byrnes and Kiger (1988) developed the Social Scale by adapting Westie's (1953) version of the Bogardus Social Distance Scale (Bogardus 1933). It was designed to ask non-black subjects about their comfort level when encountering Blacks in "various positions of prestige and intimacy during daily experiences" (Byrnes & Kiger, p. 109). Gary Kiger (personal communication, October, 1990) believed that the scale also could be used for other target groups. Subjects respond on a seven point scale ranging from 1 = very uncomfortable, to 7 = very comfortable. Factor analysis was used to determine non-intimacy items and partner items within the eight situations. Non-intimacy role items include: governor, president, personal physician, spiritual counselor, roommate, and as a renter from the subject. Partner items include dance partner and dating situations.

The Social Scale was modified for the pilot study (Appendix A, p. 160). The item "rent my home from me" was dropped, because few students would be in that situation. Instead, two other roles were included: professor and small group member in a class or group activity. A total of nine items was used: governor, president, personal physician, spiritual counselor, professor, small group member, roommate, dance partner, and dating partner.

After reviewing the results of the pilot study and determining what items were of most interest to student services, the following items were included in the final questionnaire (Appendix B):

1. As President of the U.S.
2. As my counselor
3. As my professor
4. As a member of my small group in classroom/group activities
5. As my roommate
6. As someone I would date

The six items were divided into two major areas: non-peer and peer. The first three situations involved non-peers; in these situations the other person may be seen as having authority over the respondent. The last three situations asked about comfort level with peers. Factor analysis was not used to determine the two categories, because it was felt that categorizing items on the basis of responses would bias the results (Maresh, personal communication, February, 1991).

Reliability and Validity

According to Byrnes and Kiger (1988), the reliability measures for the Social Scale included tests of internal consistency among items and test-retest analyses. The alpha reliability coefficient for their sample was .90. The test-retest reliability coefficient

was .94, and it was obtained by resurveying a subsample of 30 of the 286 respondents. The face validity was "established through the straightforward content of the scales' items" (p. 112). They also ran validity tests with the previously validated Modern Racism Scale (McConahay, 1986); the intercorrelation between it and the Social Scale was found to be $r = .48$ (Byrnes & Kiger, 1988, p. 112). Kiger (personal communication, November 10, 1990) stated that he did not feel a retest of validity or reliability would be necessary if the scale were expanded to include other ethnic groups, because it is so similar to the Bogardus scale.

After the pilot study survey was changed for current study, similar reliability and validity tests were not conducted.

No information concerning the reliability of the contact measures was presented in either the Stanford report or in the Apostle et al. (1983) study.

Subjects

Participants in the study consisted of full-time undergraduates at Oregon State University (OSU). OSU is Oregon's land, sea, and space grant university, offering baccalaureate, master's and doctoral degrees. It is mainly a residential university; with 90 percent of its 16,000 students residing in the city of Corvallis during the school year.

According to OSU Institutional Research (Barnhouse, 1990), a total of 13,241 undergraduates and 2,783 graduate students attended OSU during fall 1990. There were 154 African American, 222 American Indian, 826 Asian American, 280 Hispanic American, and 10,006 Caucasian American undergraduates enrolled full-time during winter term, 1991 (Barnhouse, personal communication, April 5, 1991).

The sample was taken from this group of full-time undergraduates during winter term. First term students were excluded from the sample because those students would not have had sufficient time to meet others at this campus. Part-time students also were excluded because this study sought information about people who had more time to interact on campus than people who attended classes only part-time.

Since this study concerned the attitudes of five major ethnic groups toward one another, it was important to include enough members of all of these groups. Upon consulting the OSU Survey Research Center, it was determined to survey 75 students from each group. This sample ensured that enough respondents were included to make comparisons. Thus, a total of 375 continuing (no first term enrollees) undergraduates at Oregon State University enrolled full time (with 12 or more hours) during the winter 1991 term were surveyed.

The Oregon State University Committee for Human Subjects declared the study exempt from review in December, 1990. Permission to obtain lists by ethnic group was granted by the Affirmative Action Office in December, 1990. The Registrar's Office supplied a computer generated random sample of 75 names and demographic information for each of the five ethnic student groups.

Survey Distribution

The support of a program advisor acquainted with many of the ethnic minority students on the OSU campus, was enlisted. The survey had the additional support of the ASOSU student body president and the presidents of three of the ethnic minority student associations. These names were included in the cover letters to students.

Cover letters (Appendix C) and surveys (Appendix B) were mailed out with business reply envelopes on January 24, 1991. Surveys were coded so that nonrespondents could be sent follow-up reminder cards and called by phone. Reminder postcards (Appendix C) were sent after one week, and a week later, beginning on February 7, 1991, phone calls were made to encourage participation. When necessary, another questionnaire, letter (Appendix C) and reply envelope were mailed. On February 15, three weeks after the initial questionnaire was sent, a second follow-up letter (Appendix C) was mailed to those who had

not been contacted by phone. A third letter was not mailed unless the subject had misplaced an original survey. This procedure was a modification of the Dillman (1978) method for mailing surveys, in that phone calls were added to the process and the final follow-up letter was omitted.

Data Analysis

Each returned survey was assigned a code number and the responses were manually entered into computer readable form to facilitate computer analysis. To determine if the respondent group differed significantly from the non-respondent group, comparisons across demographic information were performed. Items included were gender, age, class, and residence.

Frequency distributions were employed to show distribution of the respondents with regard to ethnicity, gender, and class standing. Frequency distributions were computed for response contact and comfort items for the overall group.

To test whether differences occurred among any of the ethnic groups with respect to their reported contact or comfort level with members of the target groups, two-way analyses of variance (ANOVA) were used. Analyses were performed by the respondents' gender and ethnicity. Newman-Keuls multiple comparison procedure tests of significance (Winer, 1971) were conducted to determine

where the significant differences occurred. Thus it was possible to determine how much contact and comfort each respondent ethnic group had with the other on each of the contact and comfort items.

In analyzing the comfort scale, composite scales were also used. An overall comfort score was obtained by averaging responses in all six situations toward each of the target groups. The first three situational items (president, counselor, and professor) were combined to form a non-peer group measure. The last three items (member of small group, roommate, and date) were combined to form the peer group measure. Each of the six individual items was analyzed. Thus it was possible to determine how comfortable each ethnic group was with other ethnic groups.

Repeated measures analysis of variance tests (Winer, 1971) were conducted on the three composite scales: the overall comfort scale, the non-peer scale, and the peer scales. These tests were used to determine if any of the responses of a particular respondent group were different. These tests compared the mean response toward each individual target group. For example, a comparison was made among the responses of the Asian Americans toward each outgroup (African Americans, American Indians, Caucasian Americans, and Hispanic Americans) to determine if the Asian Americans felt more or less

comfortable with any one of the groups. Newman-Keuls multiple comparison procedure tests (Winer, 1971) were used to determine where the significant differences occurred.

Methods for correlating the contact scale with the comfort scale were discussed with a statistician (Maresh, personal communication, February, 1991). Because the contact items - 1) number of acquaintances, 2) number of friends (closeness), 3) duration of contact, 4) frequency of contact, and 5) reaction to the contact - were each scored differently, these items were rescaled on a five-point scale, so they could be combined into one measure.

Pearson correlation coefficients were used to determine contact and comfort relationships of ethnic groups. Each respondent ethnic group's contact scores and comfort scores for the target groups were correlated using the Pearson correlation coefficient. A total of 20 correlation coefficients were calculated for overall comfort and contact. For example, the correlation between Asian Americans' contact and overall comfort with each of the four other groups (African American, American Indian, Caucasian, and Hispanic) was determined. Thus, it could be seen if there were any significant correlations between contact and comfort for any of the ethnic respondent groups.

A similar procedure was followed for the comfort level with peers and with non-peers to obtain an additional 20 coefficients for each.

CHAPTER 4

RESULTS

The general characteristics of the responses are summarized. The data were analyzed by using a series of research hypotheses related to the contact and social distance scales, and finally, the relationship between the contact and comfort or social distance data are presented.

Respondent Characteristics

The survey was mailed to 375 full time undergraduates enrolled at Oregon State University (OSU) in late January, 1991. A total of 284 completed surveys were returned, for a return rate of 75.7 percent. This return rate was inconsistent across the five ethnic groups sampled.

Included in the sample were 75 students from each of five ethnic groups: African American, American Indian, Asian American, Caucasian American and Hispanic American. Because the number of students vary in each of these groups, a different percentage of that total OSU undergraduate population was sampled. Table 1 outlines the sample compared to the population at OSU.

When surveys were returned, it was noted that some students had been misidentified by OSU. For example, only 31 of the 57 surveys returned by OSU's American

Indian group identified themselves as even part American Indian; nearly one-third had checked Caucasian American. It is suspected that when students first enrolled at OSU, they may have misunderstood OSU's term "Native American"; they may have believed it to mean that they were born in the United States. Because so many of the "Native Americans" were not, in fact, American Indian, it would appear that the number of American Indians at OSU was vastly overestimated.

Table 1: Sampling and Response Rates

Ethnicity	OSU Underg Population	Actual Sample	Actual % Sampled	Number of Respondents	Response Rate
African American	154	76	49	49	64
American Indian	222	45	20	27	60
Asian American	826	81	10	62	77
Caucasian American	10,006	96	1	79	82
Hispanic American	280	77	28	67	87
Total	11,488	375	3	284	75

Some of the returned surveys from the other ethnic groups also did not match the original sample group. The only sampled group which did not have members of other ethnic groups within it was the African American.

In addition to these discrepancies, some of the respondents checked two ethnic groups as "best describing" their ethnicity. Using chi square and t

tests, the responses from these "mixed" ethnic groups were compared to those of the "pure" group from which they were surveyed. Those tests revealed no significant differences in responses between those identifying themselves as African American or of "mixed" African American ancestry, so the mixed group was added to the African American group. There were, however, some significant differences between responses for those listing themselves as part American Indian and the other Americans Indians. Three students had circled Caucasian, and written "part Indian," or "17% Indian"; those were added to the Caucasian American group. Another listed Hispanic as her primary identification, and she was added to that group.

Due to the inaccuracy of the ethnic composition of the original sample, it is difficult to tell the exact return rates of responses within each group. When the sample was readjusted to correspond to the self-reported identification, the following return rates were obtained: 64 percent of African Americans; 60 percent of American Indians; 75.6 percent of Asian Americans; 77 percent of Caucasian Americans; and 87 percent of Hispanic Americans (See Table 1).

Other demographic data from nonrespondents were compared to that of the respondents (see Table 2). There were no significant differences in age, class standing or

listed residence. The mean age of the sampled group was 21.87 and the mean age of the respondents was 21.99. Women were significantly more likely to respond than men. The female response rate was 82 percent, while males responded at a 71 percent rate.

Table 2: Sampling and Response Rates: Other Demographic Variables

	Sample Group N = 375	Percent of Sample	Respondents N = 284	Percent of Respondents
<u>Gender</u>				
Male	220	59	157	55
Female	155	41	127	45
<u>Class</u>				
First Year	92	25	65	23
Sophomore	98	26	76	27
Junior	81	22	63	22
Senior	104	28	80	28
<u>Residence</u>				
Cooperative	10	3	9	3
Residence Hall	100	27	82	29
Apartment/ House	221	59	158	56
Fraternity/ Sorority	44	12	35	12

The resulting sample of the ethnic groups from which the data were analyzed consisted of 49 African Americans, 27 American Indians, 62 Asian Americans, 79 Caucasian Americans, and 67 Hispanic Americans.

Data Analysis

The first two hypotheses concern differences in responses among the ethnic groups toward one another. Since the method of data analysis was the same for both contact and comfort scales, this section explains the general method of analysis employed for both.

All the data analysis was conducted with comparisons between mean responses toward ethnic groups, e.g., the mean answer of each of the four non-Hispanic groups about Hispanic Americans were compared. To compare differences between answers among respondent groups toward each target group, Newman-Keuls multiple comparisons tests were used.

To avoid contaminating the statistics when comparing differences among the respondent groups toward any one target group, that respondent group was not included. For example, when asking about the number of African American acquaintances, the responses of African Americans themselves were excluded. The responses of each group about their own group are shown in the tables in parentheses. The total mean of all of those non-African American respondents is termed the "outgroup

total," and appears near the end of each row in each table comparing responses by ethnicity.

Significant differences were computed to see if differences occurred by gender. Again, the responses of each group about itself were excluded. For example, in looking at the responses of men and women about American Indians, the American Indians themselves would not be counted. Thus, the comparisons between men and women are comparisons between outgroup men and outgroup women toward a particular target group or ingroup.

Responses of men and women within each respondent group were also compared, i.e., the answers of Asian American men were compared with those of Asian American women about a particular target group. In this study, the majority of comparisons using this method revealed no significant differences. Some differences did occur within these comparisons, and tables showing these analyses appear in Appendix D.

Contact Among Ethnic Groups

Hypothesis 1: There will be no significant difference in reported contact among the various ethnic groups toward any of the target ethnic groups.

To test this hypothesis, responses for all five groups toward the groups on all five contact questions were compared. There were significant differences found

among groups on every item except "number of friends." In addition, differences between outgroup men and women were found in some cases. However, no significant differences were found by gender within any of the ethnic groups on the contact scale, e.g., Caucasian American men and Caucasian American women did not answer differently about any of items on the contact scale. Findings for each of the contact items are described further below.

Number of Acquaintances

Students were to mark how many people they knew well enough to say "Hi" to from each ethnic group. The responses of the entire group toward each of the five target groups appear in Figure 1. Over 84 percent knew over ten Caucasian Americans. The most common response for all target groups except Caucasian Americans was "one to five." Almost 40 percent knew no American Indians. A few students wrote that they did not think they knew any American Indians and they would like to have that opportunity. One Hispanic American woman noted that in all her travels across the country, only one person had identified himself as American Indian.

Table 3 shows comparisons between the number of acquaintances that each ethnic group reported. On the left side of the table are the target groups (those being asked about) and across the top of the table are the respondent groups. Reading the table across the rows,

Figure 1 Acquaintances of All Respondents Among Target Groups

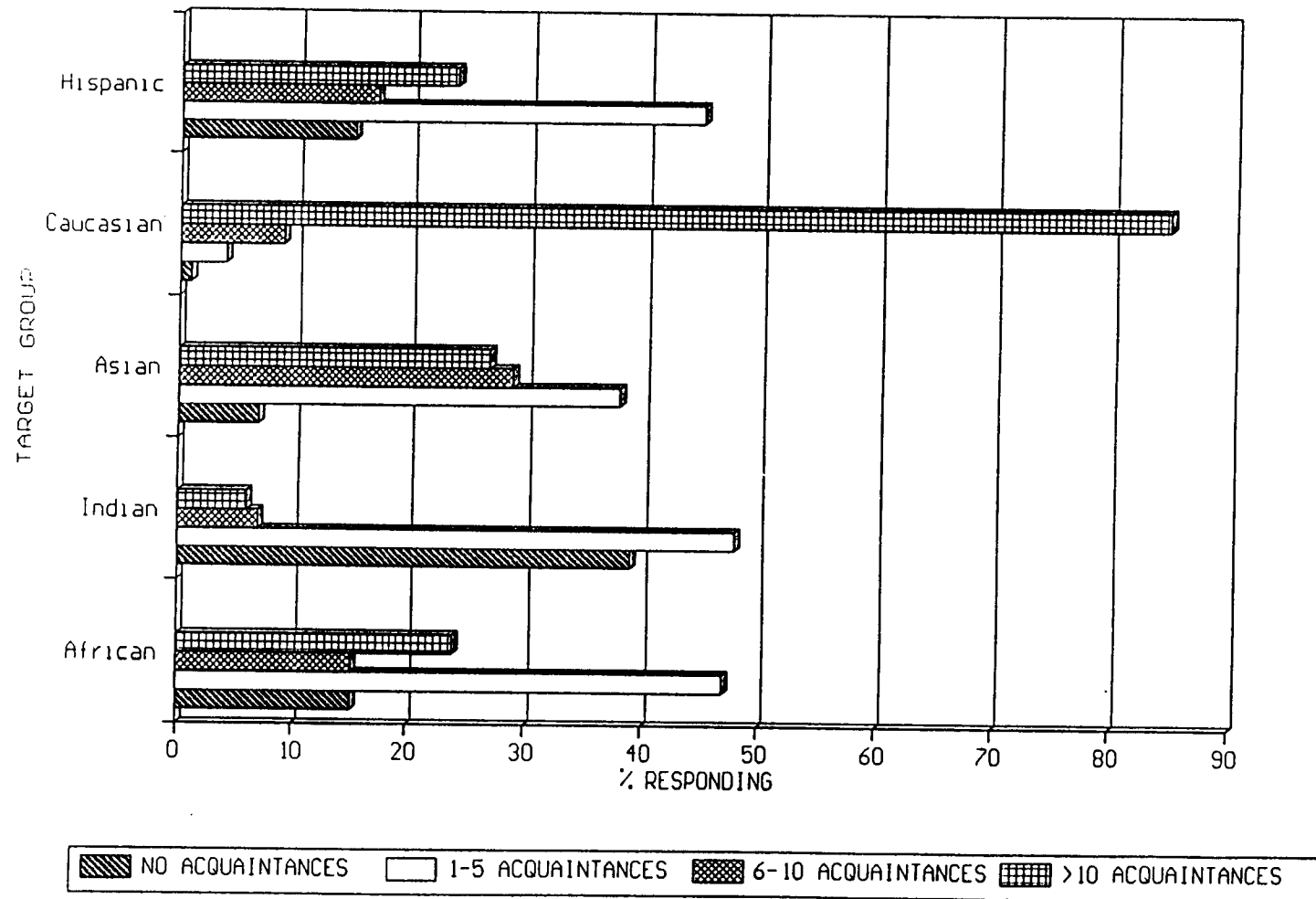


Table 3: Number of Acquaintances Among Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA F	p
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD		
African American	(3.67)	.69	2.15	.95	2.02	.91	2.10	.74	2.62*	.89	2.23 n=190	.89	6.35	.001
American Indian	1.84	.72	(3.00)	1.00	1.40**	.49	1.68	.65	1.80	.75	1.68 n=256	.67	5.36	.001
Asian American	2.63	.73	2.33	.88	(3.48)	.74	2.46	.84	2.73	.99	2.56 n=221	.88	2.28	.080
Caucasian American	3.88	.33	3.70	.61	3.58	.86	(3.91)	.36	3.77	.58	3.73 n=202	.65	1.96	.121
Hispanic American	2.82***	.91	2.30	.91	2.03	.77	2.05	.85	(3.33)	.93	2.25 n=217	.90	10.10	.001

1 = none; 2 = one to five; 3 = six to ten; 4 = more than ten

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparison test among means across row is significant at the $p < .05$ level.

- * Hispanic Americans have significantly more African American acquaintances.
- ** Asian Americans have significantly fewer American Indian acquaintances.
- *** African Americans have significantly more Hispanic American acquaintances.

one can view how each of the respondent groups answered about each ethnic group. For example, in the first row, African Americans reported a mean of 3.67, (SD = .69) which meant they had close to response 4 or "more than ten" acquaintances within their own group. The mean for the four categories appears in parenthesis (), which indicates that it was not included in the statistical analysis. American Indians reported a mean of 2.15 (one to five African American acquaintances); Asian Americans 2.02, Caucasian Americans 2.10, and Hispanic Americans 2.62.

At the end of the row is the p value ($p < .001$) from the analysis of variance, which indicates that somewhere in that row is a significant difference. The Newman-Keuls multiple comparisons test showed that Hispanic Americans had significantly more African American acquaintances than did the other groups, thus one asterisk appears after the mean of 2.62. The legend at the bottom of the table references the other differences that Newman-Keuls tests showed. Thus, in the second row, it is evident that Asian Americans have fewer American Indian acquaintances, and in the bottom row, it is shown that African Americans have significantly more Hispanic American acquaintances.

In addition, in comparing responses for each respondent group (down the columns), it is apparent that

all minority ethnic groups had more Caucasian American acquaintances than among their own groups. Statistical comparisons were not made, however.

The number of acquaintances compared by gender is shown in Table 4. Non-Asian American men reported knowing significantly more Asian Americans than women did.

Number of Friends

The findings in the mean number of friends from each group ranged from none to 99 (see Table 5), thus the standard deviations became quite high. The respondents tended to have fewer American Indian (.64) than Caucasian American friends (7.65). However, no significant differences were found among the responses toward each of the five groups.

Every group had more friends who were Caucasian American than friends from among their own group. All groups reported the next highest number of friends from among their own group.

There were some differences in total number of friends. Caucasian Americans report having a total of 26 friends, the highest number of friends. African Americans had 21, American Indians 18, Asian Americans 17.5, and Hispanic Americans had 17, the fewest friends. As with acquaintances, minority groups reported having more friends among Caucasian Americans than among their

Table 4: Number of Acquaintances Among Target Groups: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	2.16	130	1.20	2.32	104	1.19	1.20	.27
American Indian	1.68	142	.68	1.68	114	.67	.01	.92
Asian American	2.70**	122	.85	2.39**	99	.88	7.73	.01
Caucasian American	3.66	105	.74	3.80	97	.51	1.48	.23
Hispanic American	2.27	123	1.16	2.22	94	1.21	.43	.52

1 = none; 2 = one to five; 3 = six to ten; 4 = more than ten

Note: All respondents but target groups were included in analysis.

** indicates comparison between means across row is significant at the $p < .01$ level.

Table 5: Mean Number of Friends Among Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA F	p
	African American n=47	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=66	SD	Outgroup Total	SD		
African American	(8.26)	9.25	1.63	2.13	.95	1.87	1.41	2.89	2.20	3.67	1.53 n=234	2.86	2.06	.11
American Indian	.77	1.49	(5.67)	7.73	.31	.78	.72	1.33	.75	1.29	.64 n=253	1.25	1.93	.13
Asian American	1.60	2.53	2.19	4.56	(6.56)	5.79	3.13	9.59	1.86	2.62	2.30 n=219	6.26	.73	.54
Caucasian American	8.36	13.39	6.93	6.73	8.79	14.42	(18.85)	24.84	6.39	5.91	7.65 n=201	11.04	.58	.63
Hispanic American	2.06	3.34	1.63	1.90	.95	2.67	1.86	4.39	(6.15)	8.36	1.61 n=214	3.47	1.14	.34

() denotes responses for same group; these means were not included in statistical analyses

own groups, though again, statistical comparisons were not made.

Duration of Contact

Subjects were asked how long they had known the person they "knew best" from each group. Responses for length of time known ranged from one to four: "less than six months," "six months to one year," "over a year," and "doesn't apply."

Figure 2 illustrates how the entire group responded about each ethnic group. Same ethnicity responses were included. Caucasian Americans were known the longest period of time, as over 80 percent of the respondents had known them over a year. Again, people had least contact with American Indians - just over 50 percent answered "doesn't apply." The most frequent response toward all other groups was "over a year."

When comparing ethnic group responses, "doesn't apply" was omitted in computed means and conducting statistical analyses. Thus, the total number of respondents varies in this analysis. Totals are indicated in Table 6.

The mean responses toward all groups but Caucasian Americans showed that most people had known a member of another group for at least six months. Caucasian Americans had been known the longest; most had known them over a year.

Figure 2 Duration of Contact of All Respondents With Target Groups

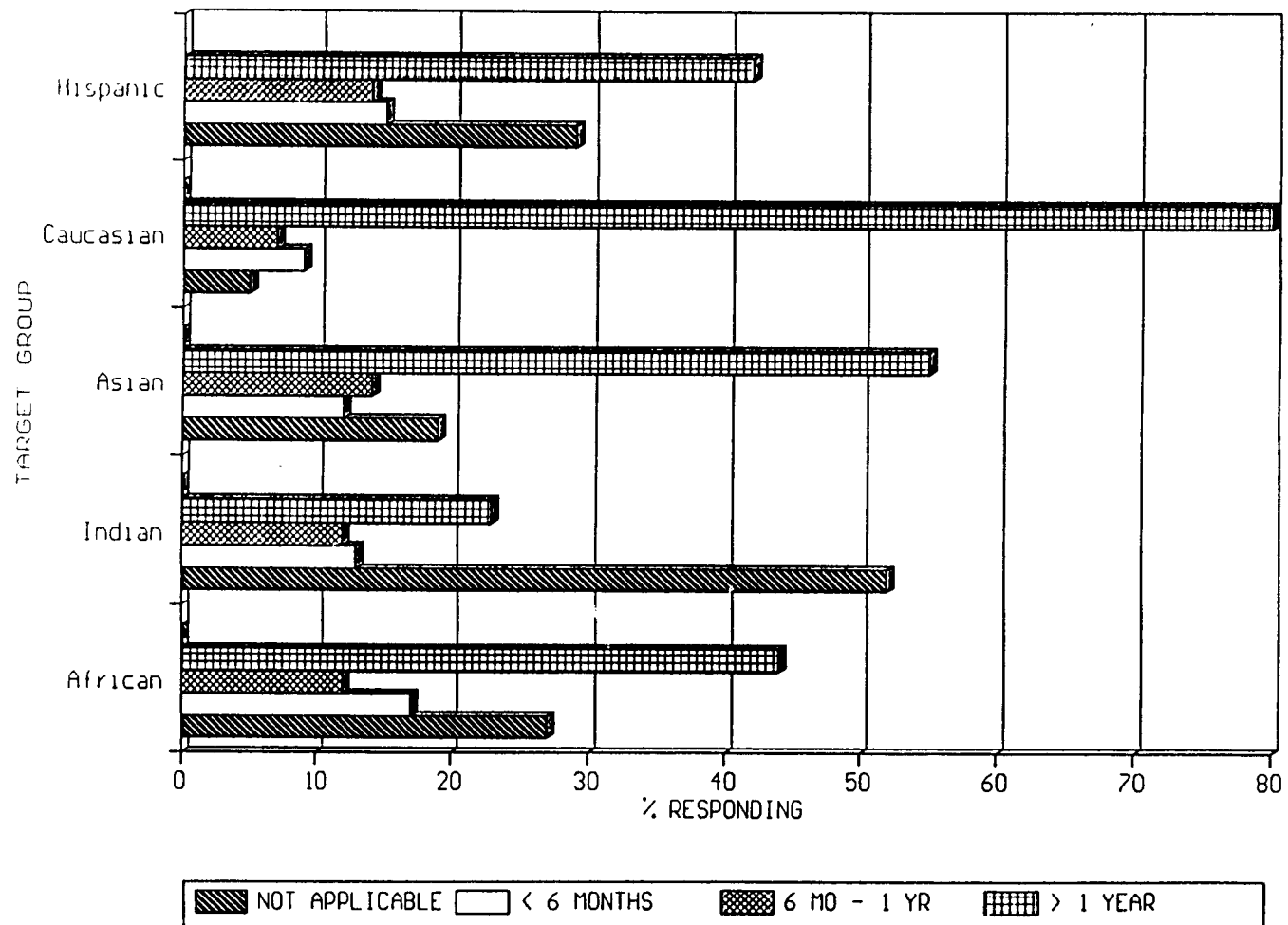


Table 6: Duration of Contact with Target Group Member Known Best: by Ethnicity

	Respondent Group													
Target Group	African American	SD	American Indian	SD	Asian American	SD	Caucasian American	SD	Hispanic American	SD	Outgroup Total	SD	ANOVA F	p
African American	(2.68) n=47	.69	2.56 n=16	.73	2.06 n=34	.85	2.42 n=55	.81	2.25 n=52	.90	2.30 n=157	.85	1.73	.16
American Indian	2.21 n=28	.74	(2.64) n=22	.73	1.94 n=18	.87	2.29 n=34	.84	2.03 n=33	.88	2.14 n=113	.83	.90	.45
Asian American	2.38 n=40	.81	2.12 n=17	.86	(2.83) n=59	.46	2.56 n=59	.75	2.38 n=50	.81	2.42 n=166	.80	1.29	.28
Caucasian American	2.60 n=45	.75	2.84 n=25	.47	2.71 n=56	.62	(2.86) n=79	.47	2.69 n=62	.67	2.70 n=188	.65	.74	.53
Hispanic American	1.97* n=37	.87	2.65 n=17	.61	2.08 n=36	.84	2.40 n=50	.83	(2.76) n=58	.57	2.24 n=140	.84	3.63	.02

1 = less than six months; 2 = six months to one year; 3 = over a year

Note: number of responses varies because "doesn't apply" responses were omitted.

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons among means across row is significant at the $p < .05$ level.

* African Americans have known Hispanic Americans significantly less time than American Indians and Caucasian Americans.

The only significant difference among ethnic groups was found in responses to Hispanic Americans. African Americans report knowing a Hispanic American significantly less time than Caucasian Americans and American Indians.

No significant differences were found between men and women with regard to duration of contact. Those means may be found in Appendix D, Table 27.

Frequency of Contact

Students reported how often they actually interacted with people for more than 15 minutes. Responses from one to five were: "once a day," "once a week," "once a month," "rarely," or "doesn't apply." Figure 3 shows responses for the respondents. Clearly, Caucasian Americans were seen most often. Nearly 37 percent of respondents answered "doesn't apply" about interacting with American Indians. Most subjects saw them about once a month. Even American Indians themselves reported that they saw other American Indians only about once a week. Every other group was seen daily by at least 28 percent of all respondents.

As in the previous item, when comparing differences between means by ethnic group, the "doesn't apply" response was omitted; therefore the number of respondents varies for each item. Results appear in Table 7.

Figure 3 Frequency of Contact of All Respondents With Target Groups

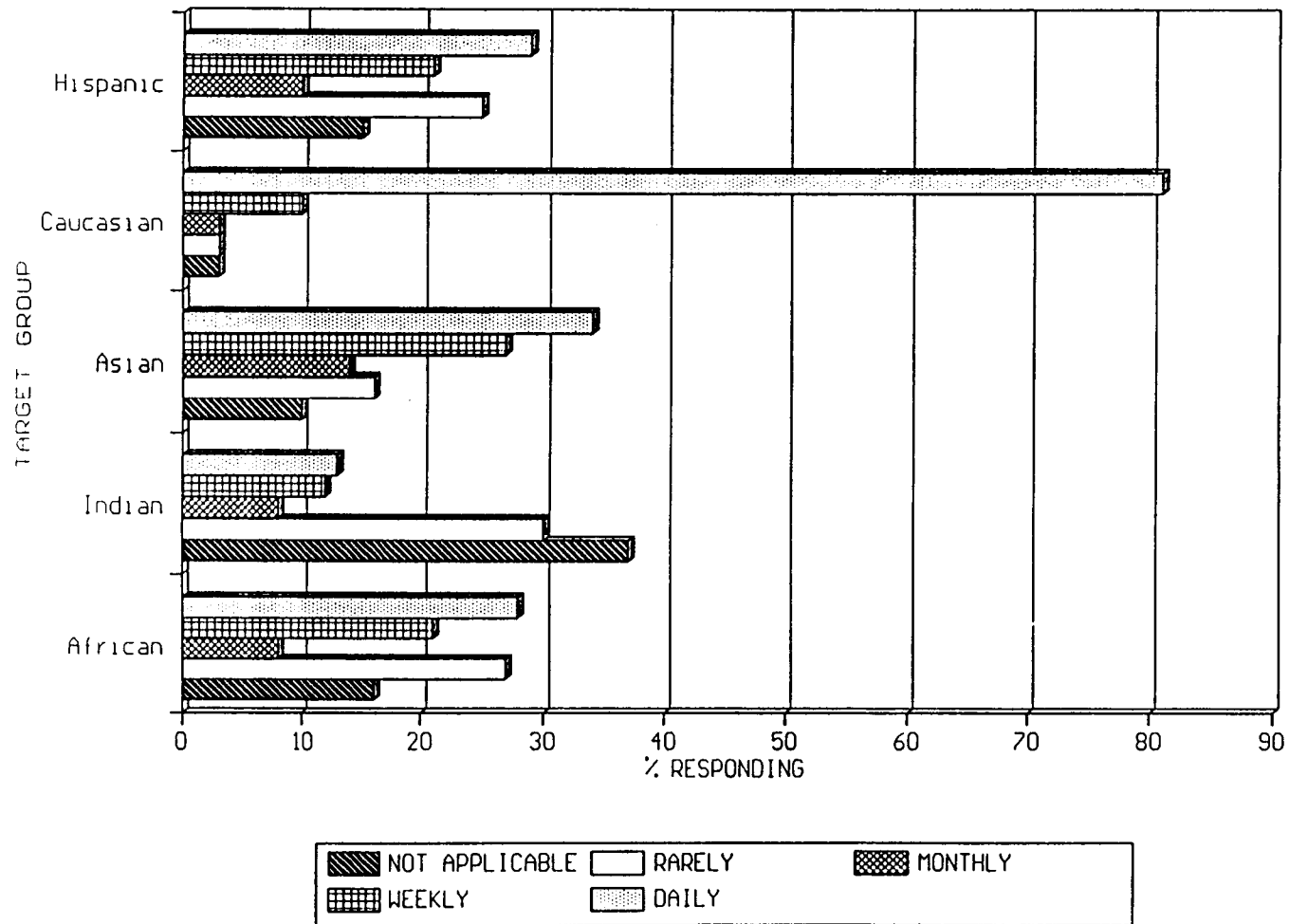


Table 7: Frequency of Contact With Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA F	p
	African American	SD	American Indian	SD	Asian American	SD	Caucasian American	SD	Hispanic American	SD	Outgroup Total	SD		
African American	(1.26) n=47	.71	2.27 n=22	1.24	2.89* n=47	1.15	3.05* n=63	1.10	2.28 n=58	1.17	2.68 n=237	1.19	5.74	.01
American Indian	2.56 n=32	1.22	(2.04) n=25	1.21	3.27 n=33	1.07	2.96 n=49	1.21	3.13 n=40	1.14	2.98 n=179	1.18	2.23	.09
Asian American	2.30 n=40	1.09	2.61 n=23	1.27	(1.60) n=62	.97	2.40 n=68	1.07	2.03 n=59	1.03	2.29 n=252	1.10	2.14	.10
Caucasian American	1.30 n=46	.70	1.41 n=27	1.01	1.36 n=59	.78	(1.04) n=79	.19	1.38 n=64	.72	1.36 n=229	.77	.13	.94
Hispanic American	2.42 n=43	1.26	2.23 n=22	1.07	3.00** n=51	1.20	2.82 n=62	1.08	(1.44) n=63	.86	2.70 n=241	1.18	3.39	.02

1 = once a day; 2 = once a week; 3 = once a month; 4 = rarely

Note: number of responses varies because "doesn't apply" responses were omitted.

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level.

* Asian Americans and Caucasian Americans have less frequent contact with African Americans.

** Asian Americans have less frequent contact with Hispanic Americans than do African Americans and American Indians.

Caucasian Americans and Asian Americans saw the African Americans significantly less (about once a month) than other outgroups, which saw African Americans about once a week. Asian Americans reported that they saw Hispanic Americans significantly less often than other minority groups did.

Reaction Toward Ethnic Groups

Responses for the degree of positive feeling ranged from one (very positive) to five (very negative), with six being "doesn't apply." Figure 4 contains the responses of the total sample. Again, responses reflected less contact with American Indians. Nearly 70 percent of the respondents felt positive toward all other groups.

As with other contact items, the "doesn't apply" response was omitted in comparing means across ethnic groups (Table 8), so there were fewer subjects responding about American Indians. Asian Americans and Hispanic Americans felt significantly less positive toward American Indians than did other outgroups.

When comparing group responses on the basis of gender, the non-African American males felt significantly less positive about African Americans than the women did (Table 9).

Figure 4 Reaction of All Respondents to Target Groups

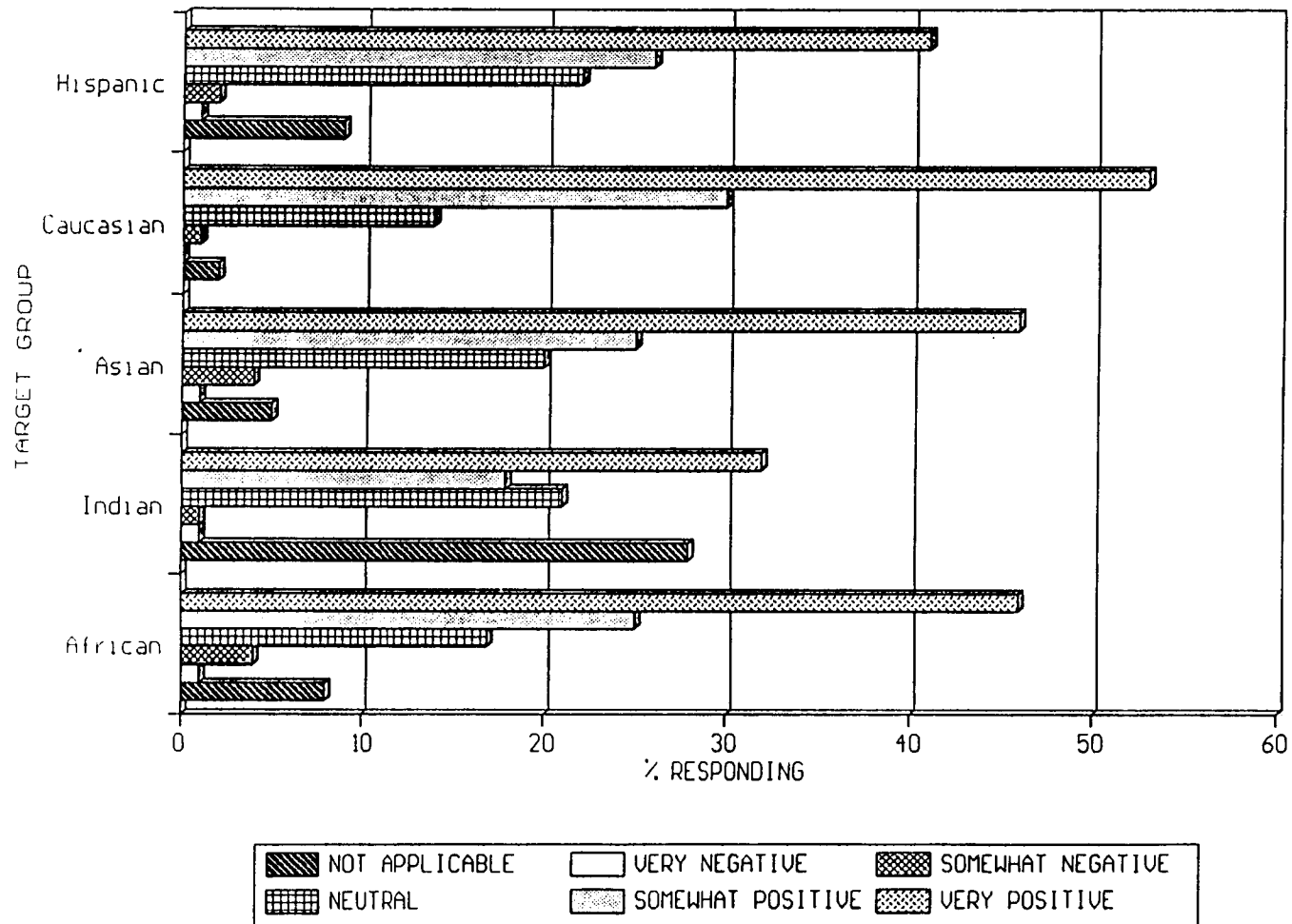


Table 8: Mean Reaction Toward Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA	
	African American	SD	American Indian	SD	Asian American	SD	Caucasian American	SD	Hispanic American	SD	Outgroup Total	SD	F	p
African American	(1.44) n=48	.94	1.88 n=25	.97	2.06 n=51	.95	1.78 n=72	1.00	1.84 n=64	.91	1.88 n=212	.96	1.04	.38
American Indian	1.62 n=34	.85	(1.33) n=27	.55	2.25* n=36	.94	1.72 n=54	.81	2.19* n=52	.89	1.95 n=176	.90	5.57	.01
Asian American	1.79 n=42	.98	1.77 n=26	.86	(1.65) n=62	.77	1.95 n=74	1.12	1.97 n=64	.93	1.90 n=206	1.00	.47	.70
Caucasian American	1.98 n=47	.92	1.48 n=27	.75	1.73 n=59	.76	(1.37) n=79	.62	1.66 n=64	.76	1.73 n=197	.81	2.57	.06
Hispanic American	1.75 n=44	.89	1.73 n=26	.78	2.13 n=53	.94	2.00 n=70	.96	(1.55) n=65	.77	1.94 n=193	.93	1.92	.13

1 = very positive; 2 = somewhat positive; 3 = neutral; 4 = somewhat negative

Note: number of responses varies because "doesn't apply" responses were omitted.

() denotes responses for same group; these means were not included in statistical analyses

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level.

* Asian Americans and Hispanic Americans have significantly less positive reactions toward contact with American Indians.

Table 9: Mean Reaction Toward Target Groups: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	2.01*	116	1.03	1.72*	96	.83	5.26	.02
American Indian	1.94	98	.92	1.96	78	.89	.04	.85
Asian American	1.89	117	1.00	1.91	89	1.01	.02	.88
Caucasian American	1.76	103	.83	1.70	94	.79	.20	.66
Hispanic American	1.94	107	.91	1.94	86	.95	.00	.96

1 = very positive; 2 = somewhat positive; 3 = neutral; 4 = somewhat negative; 5 = very negative

Note: 5 = doesn't apply responses were omitted.

All respondents but target groups were included in analysis.

* indicates comparison between means across row is significant at the $p < .05$ level.

Summary of Interethnic Contact

Since significant differences among ethnic groups were found on a number of contact items, the first hypothesis must be rejected. The only contact item for which significant differences did not occur was the mean number of friends. Differences were found toward some target groups with regard to number of acquaintances, frequency of contact, degree of positive feeling, and duration of contact.

Caucasian Americans and Asian Americans had less contact with the minority groups (African Americans, American Indians, and Hispanic Americans) than those groups themselves did. All groups tended to have more contact with the most numerous group on campus - the Caucasian Americans. Respondents reported the most number of friends and acquaintances from among the Caucasian American group.

Overall, there was little contact with American Indians. Asian Americans reported less frequent contact with them. In addition, Asian Americans and Hispanic Americans reported less positive reactions about interactions with American Indians.

African Americans had more Hispanic American acquaintances and vice versa than did other groups. However, African Americans also reported knowing Hispanic Americans less time than did other outgroups.

Asian Americans and Caucasian Americans reported less frequent contact with African Americans.

With regard to gender differences, men had more Asian American acquaintances than did women. Men and women had virtually the same reaction toward all groups but African Americans. Women were significantly more positive in their reaction toward contact with African Americans than were men.

Students were also asked to list any OSU student organizations to which they belonged. A total of 57 percent of the students listed at least one organization. American Indians reported the most participation (70 percent), and Caucasian Americans reported the least (49 percent). The organizations listed showed a number of wide ranging interests: ethnic groups were often listed, but so were academic clubs and fraternity and sorority affiliations. One Caucasian woman wrote, "If I would have been involved in more organizations at school, I would have met many more people of different races."

In a "comments" question, students of all ethnic groups stated that there was not much interaction or participation among ethnic groups at OSU. Several said they had no time for interaction on campus; they studied, worked and went to classes. One Asian American woman said there were not "comparable ratios of different people, so there isn't much interaction." A Hispanic

male stated there "is little interaction between groups of different ethnicity. There should be more programs to meet different people." An Asian American man stated that "each group seems to intermingle among themselves." One sophomore Caucasian American wished she could have met "more different kinds of people."

Others had more positive comments. For instance, several Asian Americans and one Caucasian American woman remarked that people were mostly "very friendly" and "helpful." Several remarked that as long as a person was nice to them, they "got along well" with anyone. An Asian American said that because he was from Hawaii, a place of mixed cultures, he had had no problems interacting with other cultures. An African American senior wrote that he had "no problems interacting with anyone," and did not see others as "different."

Several Hispanic Americans had no problems. One remarked, "All groups are the same, except for color." Another stated, "As I approach my fourth year on this campus I have yet to see (nor hear) a single incidence of racism towards a fellow student." A sophomore echoed his sentiment: "I don't feel like I discriminate against anyone... or am discriminated against." A woman wrote, "I adore interacting with varied cultures. It is always enlightening and stimulating and expansive. I truly do believe we are a global community."

One Caucasian American stated, "I have not had any problems with any of the different racial or ethnic groups. As far as I can see, everyone gets along real well."

Comfort Level Among Ethnic Groups

Hypothesis 2: There will be no significant differences among any of the ethnic groups in their reported comfort level toward any of the target groups.

The comfort scale consisted of six different role questions concerning people from each of the five ethnic groups. Respondents were to circle a number from one (very uncomfortable) to seven (very comfortable), with four as the neutral response. The comfort score for each item was determined by computing the mean contact response scores for all respondents in each ethnic group. The higher the mean, the more comfortable the group felt toward a member of that ethnic group in that role or situation.

Data Analysis

As with the contact scale, a two-way analysis of variance was conducted to determine if there were differences in how any of the ethnic groups answered about a particular target group. Differences were compared by ethnicity and by gender.

The target group's responses about themselves were omitted so as not to contaminate the statistics. Thus, the Asian Americans' responses toward Asian Americans were excluded. A group's responses toward its own group were omitted in statistical analysis, but means for those groups appear in parentheses in the tables. Including same group responses would have skewed the analysis. For example, when considering how comfortable people were with Caucasian Americans, the responses of the Caucasian Americans were not included.

Tests were also conducted to see if there were significant differences between responses of men and women in any of the respondent ethnic groups, i.e., were scores of Hispanic men and Hispanic women significantly different? Tables showing the few cases when this occurred appear in Appendix D.

To determine if the responses of each group toward any of the groups were significantly different, repeated measures tests of significance were conducted on the three composite comfort scales. For example, the scores of Asian Americans toward each of the other groups may have been different, but until the repeated measures test was conducted, it was unknown whether these differences were significant. This test compared each mean with each of the other means to determine significance.

Such tests of significance could not be conducted with the outgroup totals, because outgroup members were different in every case. Tests had to be conducted separately with each of the respondent ethnic groups.

The following section outlines differences in the overall scores, the combined non-peer and peer scores and the individual items making up those combinations.

Overall Comfort Level

Table 10 shows comparisons between overall mean comfort level toward the target group that each ethnic group reported. The means for all six items were combined for an overall mean for each group toward each target ethnic group. On the left side of the table are the target groups (those being asked about), and across the top of the table are the respondent groups. The number of respondents for this and the other composite scales is less than the number of respondents for some of the individual items because respondents did not always answer every single item for every target group.

Reading the table across the rows, one can determine how each of the respondent groups answered about each ethnic group. For example, in the second row, the American Indians reported a mean of 6.45, with a standard deviation of 1.08, which meant that they were comfortable with their own group. The mean of 6.45 - and all those for groups answering about themselves - appear in

Table 10: Overall Composite Scores of Mean Comfort Level with Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA F p	
	African American n=47	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=78	SD	Hispanic American n=61	SD	Outgroup Total	SD		
African American	(6.53)	.84	5.90	1.32	5.22	1.42	5.70	1.27	5.72	1.31	5.60 n=227	1.34	2.52	.06
American Indian	5.63	1.39	(6.45)	1.08	5.33*	1.40	5.96◇◇	1.15	5.62	1.35	5.66 n=244	1.35	2.65	.05
Asian American	5.32◇	1.47	5.64	1.39	(5.94)	1.02	5.40◇	1.44	5.43	1.43	5.42 n=212	1.43	.30	.83
Caucasian American	5.54**	1.25	6.40◇◇	.99	5.95◇◇	1.29	(6.68)	.61	6.30◇◇	1.16	6.02 n=198	1.16	5.51	.001
Hispanic American	5.72	1.28	5.83	1.47	5.38	1.38	5.73	1.30	(6.39)	1.34	5.64 n=210	1.34	1.12	.34

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level.

* Asian Americans are significantly less comfortable with American Indians than are Caucasian Americans.

** African Americans are significantly less comfortable with Caucasian Americans than are American Indians and Hispanic Americans.

Diamonds indicate that repeated measures tests were significant down the columns for the respondent groups. Means in parenthesis were not included in the analyses.

◇ indicates the mean is lower than the other means down the column.

◇◇ indicates the mean is higher than the other means down the column.

parentheses (), which indicates that it was not included in the statistical analysis.

All but one group reported a higher level of comfort with their own group. Asian Americans report being slightly more comfortable with Caucasian Americans than with their own group.

Beginning with the first column of the second row of Table 10 for the target group "American Indian," the African Americans report a mean of 5.63, Asian Americans 5.33, Caucasian Americans 5.96, and Hispanic Americans 5.62. If the p value at the end of the row is less than .05, then the analysis of variance has shown that somewhere in the row is a statistically significant difference. The Newman-Keuls test of multiple comparisons revealed that the Asian Americans were significantly less comfortable with American Indians than the Caucasian Americans were. Other differences in that row were not significant.

The only other significant difference in responses toward any one target group occurred toward Caucasian Americans where the differences were even more significant ($p < .001$). Newman-Keuls tests showed that African Americans were significantly less comfortable with Caucasian Americans than American Indians and Hispanic Americans. However, African Americans still

reported a mean of 5.54 which is in the comfortable range.

Indeed, all the scores toward each target group fall well within the comfortable range (from 5.42 toward Asian Americans to 6.02 toward Caucasian Americans - see Table 10). This showed that all groups were fairly comfortable with members of other groups in the various situations. Many respondents from all ethnic groups simply marked 7 or "very comfortable" for all five groups for all six items.

The repeated measures test, which was used to compare the responses of a particular ethnic group toward other ethnic groups, showed there were significant differences among responses for each respondent group. As with the other analyses, answers of the group toward itself were omitted. To view this comparison, one would look down each column of means. Diamonds () mark those means which were significantly different in each column. For example, the first column on Table 10 shows how African Americans responded toward all target groups. The mean response toward Asian Americans was significantly lower (shown by the single diamond) than toward other outgroups, but other responses were not significantly different from one another.

In the third column, Asian Americans were significantly more comfortable (as shown by the two

diamonds) with Caucasian Americans than with the other ethnic groups ($\bar{M} = 5.95$). It is interesting to note how close the mean responses toward their own group was (5.94) to that with the Caucasian Americans. Asian Americans reported means of 5.22, 5.33, and 5.38 toward African Americans, American Indians, and Hispanic Americans, respectively, but those three were not significantly different from one another.

American Indians and Hispanic Americans were also significantly more comfortable with Caucasian Americans than with other outgroups. Asian Americans were rated lower, but the differences were not significant.

Caucasian Americans were significantly more comfortable with American Indians than they were with Asian Americans.

Non-Peer Comfort Level

To obtain these figures, the first three comfort items (President of the United States, counselor, and professor) were combined (Table 11). Again, the respondents were comfortable with all target groups, but felt most comfortable toward Caucasian Americans ($\bar{M} = 6.00$), and least comfortable toward Asian Americans ($\bar{M} = 5.41$).

The analysis of variance showed differences among respondent groups toward each target group to be significant in three cases: toward African Americans,

Table 11: Non-peer Composite Scores of Mean Comfort Level with Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA F p	
	African American n=47	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=78	SD	Hispanic American n=61	SD	Outgroup Total	SD		
African American	(6.46)	.87	6.06◇◇	1.33	5.39	1.50	5.95◇◇	1.31	5.70	1.35	5.75 n=283	1.39	2.68	.05+
American Indian	5.59	1.49	(6.44)	1.09	5.38*	1.42	6.01◇◇	1.17	5.50	1.51	5.65 n=249	1.40	3.03	.03
Asian American	5.41	1.58	5.65	1.42	(5.80)	1.20	5.39	1.61	5.32	1.54	5.41 n=216	1.55	.29	.83
Caucasian American	5.44**	1.32	6.48◇◇	.90	6.01◇◇	1.26	(6.68)	.59	6.22◇◇	.93	6.00 n=201	1.18	6.34	.001
Hispanic American	5.65	1.46	5.80	1.51	5.36	1.42	5.77	1.36	(6.25)	.88	5.63 n=212	1.42	1.19	.32

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

- + ANOVA shows a difference in responses toward African Americans, but Newman Keuls does not.
- * Asian Americans are significantly less comfortable with American Indians than are Caucasian Americans.
- ** African Americans are significantly less comfortable with Caucasian Americans.

Diamonds indicate that repeated measures tests were significant at the $p < .05$ level down the columns for the respondent groups. Means in parentheses were not included in the analyses.

- ◇ indicates the mean is lower than the other means down the column.
- ◇◇ indicates the mean is higher than the other means down the column.

American Indians, and Caucasian Americans. Newman-Keuls tests of multiple comparisons failed to show differences in comfort level toward African Americans. The test did show that Asian Americans were less comfortable with American Indians than were Caucasian Americans. In addition, African Americans reported less comfort with Caucasian Americans than did other outgroups.

Repeated measures tests were conducted with this composite scale as well. As with the overall composite scale, many of the differences in the scores of respondent groups toward each ethnic group were significantly different. Daggers again are used to point out the significant differences down the columns. Responses of African Americans were not significantly different from each other, except that they were more comfortable with their own group.

American Indians rated Caucasian Americans highest ($\bar{M} = 6.48$), but African Americans were rated second ($\bar{M} = 6.06$), and the difference between the two means was not significant. Caucasian Americans were significantly more comfortable with American Indians and African Americans than with Hispanic Americans and Asian Americans.

Hispanic Americans and Asian Americans were significantly more comfortable with Caucasian Americans, but other differences were insignificant.

Table 12 shows how the outgroup men and women responded toward the five ethnic groups on the non-peer items. This table again shows the target ethnic groups on the left side of the table and the respondent groups at the top. In this case, the respondents were all of the women and men who were not members of the target group. Thus, all outgroup men and women were included.

As with the other tables, Table 12 should be read across the rows to view how men and women answered differently. In the top row are the responses toward African Americans, which is the only target group for which significant differences appear. Outgroup women reported significantly more comfort than outgroup men with African Americans in non-peer situations.

Peer Comfort Level

To obtain these figures, the last three comfort items (member of my small group, roommate, date) were included. Table 13 shows the aggregate scores. As in the previous tables, most people were comfortable with all target groups.

There was only one significant difference among ethnic group responses. African Americans reported less comfort with Caucasian Americans than did other outgroups.

Table 12: Non-peer Composite Scores of Mean Comfort Level with Target Groups: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	5.57*	129	1.49	5.96*	104	1.22	5.40	.02
American Indian	5.59	138	1.47	5.72	111	1.32	.94	.33
Asian American	5.37	119	1.57	5.45	97	1.55	.13	.72
Caucasian American	5.94	106	1.19	6.07	95	1.17	.49	.49
Hispanic American	5.53	121	1.45	5.75	91	1.38	1.44	.23

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

* indicates comparison between means across row is significant at the $p < .05$ level.

Table 13: Peer Composite Scores of Mean Comfort Level with Target Groups: by Ethnicity

Target Group	Respondent Group												ANOVA	
	African American n=47	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=78	SD	Hispanic American n=61	SD	Outgroup Total	SD	F	p
African American	(6.61)	.98	5.73	1.38	5.04◇	1.47	5.47	1.37	5.65	1.42	5.43 n=227	2.45	2.45	.07
American Indian	5.68	1.49	(6.46)	1.20	5.28	1.50	5.92◇◇	1.23	5.67	1.49	5.66 n=247	2.35	2.35	.07
Asian American	5.25◇	1.56	5.62	1.51	(6.07)	1.03	5.42	1.48	5.49	1.40	5.43 n=216	.45	.45	.72
Caucasian American	5.67*	1.42	6.32◇◇	1.21	5.88◇◇	1.40	(6.68)	.69	6.32◇◇	.97	6.03 n=199	3.32	3.32	.02
Hispanic American	5.80	1.31	5.86	1.55	5.41	1.45	5.69	1.36	(6.50)	.80	5.66 n=213	1.04	1.04	.38

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

* African Americans are significantly less comfortable with Caucasian Americans than are Hispanic Americans.

Diamonds indicate that repeated measures tests were significant down the columns for the respondent groups. Means in parentheses were not included in the analyses.

◇ indicates the mean is lower than the other means down the column.
 ◇◇ indicates the mean is higher than the other means down the column.

Repeated measures tests showed that all groups (including Asian Americans) felt most comfortable with their own group. Differences among these means are again shown by diamonds in Table 13. All minorities except African Americans felt next most comfortable with Caucasian Americans. Asian Americans were rated lowest by every group and significantly so by African Americans. Asian Americans, in turn, rated African Americans as the group with which they were least comfortable.

Asian Americans reported a mean of 5.88 toward Caucasian Americans, 5.41 toward Hispanic Americans, 5.23 toward American Indians, and 5.04 toward African Americans. American Indians were significantly more comfortable with African Americans and Caucasian Americans. Asian Americans were the least comfortable toward African Americans, and African Americans were the least comfortable toward Caucasian Americans.

Although Caucasian Americans rated American Indians highest, the differences between their responses toward other groups were insignificant.

As President

Most people were comfortable with any ethnic group as President. Many remarked that it depended on the person's qualifications.

Students were least comfortable with an Asian American ($\bar{M} = 4.85$ for non-Asian Americans), and most

Table 14: Mean Comfort Level with Target Member as President: by Ethnicity

Target Group	Respondent Group												ANOVA F p	
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD		
African American	(6.10)	1.65	5.41	1.95	4.97	1.74	5.27	1.91	5.24	1.63	5.20 n=233	1.79	.54	.66
American Indian	5.13	2.03	(6.07)	1.71	4.92	1.61	5.41	1.65	4.98	1.79	5.13 n=251	1.75	1.11	.35
Asian American	4.98	1.97	5.07	2.04	(5.33)	1.62	4.62	2.07	4.96	1.80	4.85 n=218	1.96	.60	.61
Caucasian American	5.21*	1.84	6.26	1.29	5.98	1.23	(6.56)	.82	5.88	1.45	5.80 n=202	1.51	3.81	.01
Hispanic American	5.15	1.95	5.19	1.88	4.74	1.71	5.03	1.84	(5.91)	1.32	4.99 n=214	1.83	.65	.59

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

* African Americans are significantly less comfortable with Caucasian Americans than are Hispanic Americans.

comfortable with a Caucasian American as President ($M = 5.80$ for non-Caucasian Americans). This information appears in Table 14.

Group responses differed significantly in only one case. The Newman-Keuls test showed African Americans to be significantly least comfortable with a Caucasian American as President.

As a Counselor

As Table 15 shows, no target group received below a mean rating of five or "comfortable." There were significant differences in ethnic group responses toward African Americans, American Indians, and Caucasian Americans.

Asian Americans were less comfortable with African American counselors than were American Indians and Caucasian Americans, according to the Newman-Keuls test. In addition, Asian Americans were also less comfortable with American Indian counselors than Caucasian Americans.

African Americans were significantly less comfortable with Caucasian American counselors than were other groups. African Americans were also much more comfortable with their own group as counselors; the mean for their own group was 6.69, but means toward groups were about 5.5.

Table 16 shows that women were generally more comfortable with counselors of any ethnicity, and

Table 15: Mean Comfort Level with Target Member as Counselor: by Ethnicity

Target Group	Respondent Group												ANOVA	
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD	F	p
African American	(6.69)	.68	6.41	1.01	5.36*	1.73	6.16	1.41	5.83	1.54	5.89 n=233	1.53	4.79	.01
American Indian	5.69	1.79	(6.70)	.61	5.41**	1.74	6.15	1.25	5.73	1.57	5.78 n=252	1.58	2.85	.04
Asian American	5.44	1.86	6.00	1.52	(6.02)	1.24	5.77	1.65	5.51	1.71	5.65 n=219	1.70	.94	.42
Caucasian American	5.33***	1.80	6.48	1.16	5.98	1.37	(6.71)	.67	6.32	1.03	6.00 n=203	1.42	6.26	.01
Hispanic American	5.78	1.60	6.11	1.48	5.49	1.53	5.96	1.39	(6.42)	.91	5.80 n=214	1.50	1.58	.19

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

- * Asian Americans are significantly less comfortable with African Americans than are American Indians and Caucasian Americans.
- ** Asian Americans are significantly less comfortable with American Indians than are Caucasian Americans.
- *** African Americans are significantly less comfortable with Caucasian Americans.

Table 16: Mean Comfort Level With Target Member as Counselor: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	5.73*	129	1.63	6.09*	104	1.39	3.91	.05
American Indian	5.71	139	1.63	5.86	113	1.52	.91	.34
Asian American	5.63	121	1.70	5.67	98	1.70	.08	.78
Caucasian American	5.90	106	1.44	6.11	96	1.39	1.11	.29
Hispanic American	5.77	122	1.50	5.85	92	1.50	.22	.64

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

* indicates comparison between means across row is significant at the $p < .05$ level.

significantly more comfortable toward African American counselors ($p < .05$).

As a Professor

The respondents appeared to be more comfortable with professors than with counselors. Comparing means from Table 15 with those of Table 17 shows that comfort means toward professors were all higher (above six) than the means toward counselors, most of which were lower than six. Otherwise, responses for this item were very similar to that of the counselor; analysis of variance tests showed there were significant differences among the groups for the same three target groups: African American, American Indian, and Caucasian American (see Table 17). Newman-Keuls tests failed to show significant differences toward African American professors.

Caucasian Americans were more comfortable with American Indians than were Asian Americans and Hispanic Americans.

Again, African Americans were less comfortable with Caucasian American professors than were American Indians and Hispanic Americans.

In comparing means of the total outgroup, it becomes apparent that respondents generally felt less comfortable with Asian American instructors, with a mean of 5.71, than with professors of other ethnicities, toward whom means were all over 6.06. Several students had written

Table 17: Mean Comfort Level with Target Member as Professor: by Ethnicity

Target Group	Respondent Group												ANOVA	
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD	F	p
African American	(6.57)	.76	6.37	1.39	5.87	1.43	6.43	1.17	6.02	1.41	6.16 n=234	1.35	2.88	.04+
American Indian	6.02	1.36	(6.56)	1.22	5.82	1.47	6.48*	1.06	5.82	1.63	6.06 n=253	1.40	4.18	.01
Asian American	5.80	1.55	5.89	1.65	(6.08)	1.16	5.78	1.79	5.47	1.83	5.71 n=221	1.73	.65	.58
Caucasian American	5.84**	1.50	6.70	.61	6.08	1.36	(6.78)	.55	6.38	.93	6.20 n=203	1.22	3.78	.02
Hispanic American	6.06	1.33	6.11	1.72	5.87	1.45	6.29	1.36	(6.42)	.95	6.10 n=215	1.43	1.09	.35

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

- + ANOVA shows a difference in responses toward African Americans, but Newman-Keuls does not.
- * Caucasian Americans are significantly more comfortable with American Indians than are Asian Americans and Hispanic Americans.
- ** African Americans are significantly less comfortable with Caucasian Americans than are American Indians and Hispanic Americans.

in the margin that they had difficulty understanding Asian professors, and had therefore assigned them a lower comfort score.

Women generally were more comfortable with professors of any ethnicity than were men (Table 18), though the differences were not significant except toward African Americans.

One woman commented that she was impressed by the Asian American and African American instructors, and she felt it was unfortunate that OSU did not have a more diverse group of faculty.

As a Small Group Member

As with professors, students rated members of all ethnic groups very high. The means for target groups were all above six, and at least 64 percent of all responses were seven, ("very comfortable") for every ethnic group. Newman-Keuls tests revealed that Caucasian Americans were more comfortable with American Indians than were Asian Americans and Hispanic Americans (See Table 19).

As with the professor item, Table 20 shows that women were generally more comfortable than were men with every ethnic group. However, the only significant difference was toward African Americans.

Table 18: Mean Comfort Level With Target Member as Professor: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	5.98*	130	1.51	6.38*	104	1.08	5.94	.02
American Indian	5.96	139	1.52	6.18	114	1.23	2.57	.11
Asian American	5.62	122	1.81	5.81	99	1.63	.76	.39
Caucasian American	6.15	107	1.20	6.26	96	1.26	.35	.56
Hispanic American	6.04	122	1.50	6.17	92	1.33	.63	.43

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

* indicates comparison between means across row is significant at the $p < .05$ level.

Table 19: Mean Comfort Level with Target Member as Small Group Member: by Ethnicity

Target Group	Respondent Group												ANOVA F	p
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD		
African American	(6.61)	1.13	6.44	1.40	5.97	1.41	6.41	1.10	6.11	1.31	6.21 n=231	1.29	2.06	.11
American Indian	6.13	1.42	(6.59)	1.28	5.97	1.40	6.54*	.94	6.02	1.42	6.19 n=251	1.30	3.46	.02
Asian American	6.10	1.56	6.37	1.55	(6.26)	1.15	6.37	1.09	5.97	1.46	6.19 n=219	1.37	1.31	.27
Caucasian American	6.31	1.14	6.67	.78	5.98	1.44	(6.69)	.81	6.42	.99	6.29 n=201	1.74	2.58	.06
Hispanic American	6.33	1.21	6.37	1.57	5.93	1.48	6.41	1.33	(6.46)	.97	6.25 n=215	1.32	1.79	.15

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

- * Caucasian Americans are significantly more comfortable with American Indians than are Asian Americans and Hispanic Americans.

Table 20: Mean Comfort Level With Target Member as Small Group Member: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	6.02**	128	1.46	6.45**	103	1.00	7.11	.01
American Indian	6.07	138	1.39	6.34	113	1.16	3.72	.06
Asian American	6.12	121	1.45	6.28	98	1.28	.96	.33
Caucasian American	6.18	105	1.24	6.42	96	1.09	1.88	.17
Hispanic American	6.16	122	1.40	6.38	93	1.21	1.77	.19

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

** indicates comparison between means across row is significant at the $p < .01$ level.

As Roommate

Group means were somewhat lower for this item (the means were approximately 5.5) than for the small group member item. At least two people explained that they did not like any roommates, therefore they rated all ethnic groups low, including their own. Table 21 contains this information.

Asian Americans were significantly less comfortable with American Indians than were Caucasian Americans and Hispanic Americans, according to Newman-Keuls tests. The analysis of variance test showed differences in responses about Caucasian Americans, but Newman-Keuls tests did not.

Women were more comfortable with a roommate from any one of the ethnic groups than were men. Women were significantly more comfortable with a Hispanic American roommate (see Table 22).

Table 21: Mean Comfort Level with Target Member as a Roommate: by Ethnicity

Target Group	Respondent Group												ANOVA F p	
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD		
African American	(6.53)	1.26	5.78	1.95	5.12	1.93	5.70	1.73	5.74	1.68	5.56 n=231	1.81	1.78	.15
American Indian	5.50	1.69	(6.41)	1.65	5.22*	1.95	6.04	1.46	5.63	1.70	5.63 n=251	1.71	3.06	.03
Asian American	5.10	1.87	5.67	2.02	(6.07)	1.31	5.52	1.91	5.65	1.64	5.48 n=220	1.84	.96	.42
Caucasian American	5.47	1.82	6.19	1.75	5.68	1.74	(6.67)	.94	6.23	1.18	5.88 n=201	1.62	2.69	.05+
Hispanic American	5.65	1.59	5.81	2.09	5.30	1.94	5.77	1.81	(6.49)	.97	5.62 n=214	1.84	1.02	.39

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

+ ANOVA shows a differences in responses toward Caucasian Americans, but Newman-Keuls does not.

* Asian Americans are significantly less comfortable with American Indians than are Caucasian Americans and Hispanic Americans.

Table 22: Mean Comfort Level With Target Member as a Roommate: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	5.38	127	1.93	5.80	104	1.63	3.30	.07
American Indian	5.50	137	1.78	5.80	114	1.61	2.68	.10
Asian American	5.37	121	1.86	5.62	99	1.82	.93	.34
Caucasian American	5.72	104	1.65	6.04	97	1.59	1.78	.18
Hispanic American	5.40*	121	1.91	5.90*	93	1.71	4.41	.04

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

* indicates comparison between means across row is significant at the $p < .05$ level.

As a Date

Mean responses for this item were the lowest of all the six items, but over 60 percent of the responses were "comfortable." There were higher percentages of "uncomfortable" responses than for any other item; these ranged from seven percent who were uncomfortable dating Caucasians Americans to about 25 percent of the students who were uncomfortable dating African Americans or Asian Americans.

When comparing by ethnic group, Table 23 shows that African Americans were significantly less comfortable dating Caucasian Americans than were Hispanic Americans. Although analysis of variance shows a significant difference in responses toward African Americans, Newman-Keuls does not.

Comparisons by gender for the dating item reveal that outgroup men were generally more comfortable dating outside their own ethnic group (See Table 24). They were significantly more comfortable dating Hispanic Americans and Asian Americans than the women were.

Men and women within each ethnic group responded differently about dating Caucasian Americans. The African American males and the American Indian women were more comfortable dating Caucasians than were the women and men in their ethnic group (see Appendix D, Table 35).

Table 23: Mean Comfort Level with Target Member as a Date: by Ethnicity

Target Group	Respondent Group												ANOVA F	p
	African American n=49	SD	American Indian n=27	SD	Asian American n=62	SD	Caucasian American n=79	SD	Hispanic American n=67	SD	Outgroup Total	SD		
African American	(6.69)	.85	4.96	1.76	4.05	2.01	4.32	2.21	4.98	2.04	4.51 n=230	2.09	2.88	.04+
American Indian	5.42	2.14	(6.37)	1.36	4.68	1.94	5.19	1.95	5.27	1.91	5.13 n=250	1.98	1.50	.22
Asian American	4.55	2.42	4.81	1.98	(5.90)	1.45	4.40	2.28	4.77	2.02	4.59 n=219	2.20	.80	.49
Caucasian American	5.22*	2.33	6.11	1.58	6.00	1.44	(6.70)	.76	6.26	1.28	5.91 n=202	1.71	4.35	.01
Hispanic American	5.43	2.01	5.41	1.72	5.00	1.62	4.91	1.95	(6.53)	.85	5.12 n=213	1.85	1.41	.24

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

() denotes responses for same group; these means were not included in statistical analyses.

Asterisks indicate Newman-Keuls multiple comparisons test among means across row is significant at the $p < .05$ level:

- + ANOVA shows a difference in responses toward African Americans, but Newman-Keuls does not.
- * African Americans are significantly less comfortable with Caucasian Americans than are Hispanic Americans.

Table 24: Mean Comfort Level With Target Member as a Date: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	4.56	128	2.03	4.45	102	2.17	.32	.57
American Indian	5.29	138	1.95	4.94	112	2.01	1.99	.16
Asian American	5.04**	122	2.05	4.03**	97	2.25	13.20	.00
Caucasian American	6.01	105	1.57	5.80	97	1.85	.97	.33
Hispanic American	5.39**	121	1.71	4.76**	92	1.96	7.11	.01

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

** indicates comparison between means across row is significant at the $p < .01$ level.

Summary of Comfort Level Responses

These results offer evidence that differences among ethnic groups in reported comfort level do occur, therefore hypothesis two must be rejected.

Significant differences among ethnic group responses toward Caucasian Americans were found for every item but the small group member situation. In every situation, of all minority groups, African Americans felt least comfortable with Caucasian Americans, and significantly less comfortable than other groups in many cases. One Caucasian woman noted that white men, especially in some "party" situations "create a bad feeling with a lot of black people."

American Indians were generally the most comfortable and Asian Americans the least comfortable with those of other groups.

Generally, repeated measures tests of significance showed that groups were significantly more comfortable with Caucasian Americans than with other outgroups. Asian Americans were about as comfortable with Caucasian Americans as with their own group in many cases.

Groups reported less comfort with Asian Americans than with other groups on nearly every item. Repeated measures tests showed, however, that the differences were significant only for African American respondents on the peer and overall composite scales.

Responses toward American Indians were significantly different in four cases: counselor, professor, group member and roommate. Significant differences appeared in responses toward African Americans on three items: counselor, professor, and date.

All ethnic outgroups had similar responses toward Hispanic Americans and Asian Americans. These were the only target groups for which no significant differences appear among the ethnic respondent groups. Hispanic Americans were rated somewhere in the middle of students' comfort level and Asians toward the bottom of the comfort scale.

Although differences were not significant in many cases, women were generally more comfortable with other groups than were men. Dating was the exception. Here, men were more comfortable dating outside their ethnic group than were women.

Many students added comments about their comfort level with other groups. An Asian American noted that the "enormous difference in the cultural background" made her feel "insecure," so that she couldn't really share feelings. One Caucasian American man said he'd grown up in the deep South "with an attitude against races other than Caucasian." A Caucasian American woman wrote,

I can tell by the way I answered I seem very prejudiced. I guess I am in a way, but I think it all depends on who the people are. I know an Asian American who is a good friend, but

some (the majority of) Asian Americans I feel prejudiced against.

Three Hispanic Americans and three Caucasian Americans mentioned problems with Asian Americans due to language differences. An African American woman wrote that she would like to "get to know" them more, but they seemed "so closed." An Asian American man wrote that he knew "for a fact" that some Asians "stay only with their ethnic group when it comes to meeting new people," and that those were people he "didn't want to associate with." One Caucasian American woman was upset because

Asian Americans take money from our government and drive expensive cars ... when people from this country can't get money for school.

Several students mentioned having problems getting along with African Americans. A Caucasian American male wrote that he didn't like to hear Jesse Jackson complain that

he is abused because he is black when he has more things in this world than I do. If all blacks run around like Jesse Jackson telling everybody how abused they are, I lose all of my respect for them.

An Asian American male noted that "Blacks were so hard to get along with." A Caucasian American woman said she had "not had positive interaction [with African Americans] due to the way they present themselves."

A Caucasian American male complained that African American men were "cocky" and "arrogant," especially when

playing basketball at Dixon. An American Indian male agreed,

The black football players ... (think) that all white people are racist and feel they need special attention. It is these few individuals that ruin it for the rest of us. They use their problems as a crutch and also as an advantage. I feel this makes them more of a bigot than others.

One African American woman wrote across the comfort scales that gender was more important to her than ethnicity. She stated, "Black males are arrogant, egotistical, very self centered, users, and mentally cruel especially to black women on campus."

An American Indian woman had met many African American males, which had been usually positive, but she felt the "majority" of the football players were "extremely arrogant and act as unintelligent as possible when the moment suits them, and are also violent." She stated,

I am lucky, in that I've had many positive relations before with people from this group so I don't believe in their local stereotype. The problem is that not very many Caucasians have had this interaction before and they feel these are representatives of the group. I think these obnoxious few are a horrible representation of their people, as they are highly visible and highly offensive to the majority.

She stated that some of her African American friends are hypocritical because they "persecute" other groups, such as Asians and homosexuals. "This campus has a very large population of racists."

Correlation Between Contact and Comfort Level

Hypothesis 3: The greater the respondents' contact score with an ethnic group, the higher the comfort level score on the social scale for that ethnic group.

Because items making up the contact scale were scaled differently, they were rescaled and standardized so that they could be combined into separate scores for each respondent group toward each target group. Then, using the Pearson Correlation Coefficient, these contact scores were correlated with comfort level scores for the overall comfort score and for an aggregate of non-peer and peer items.

Table 25 contains an overview of 60 correlations computed, with the significant correlations asterisked. As with other tables, the target groups appear on the left side of the table. The respondent groups appear across the top of the table.

The three positions of the asterisks represent different comparisons. The first space in a group denotes the correlation between contact and non-peer comfort level; the second position is the correlation between contact and peer comfort level; and the third position denotes the degree of correlation between contact and overall comfort level. For example, the correlations between contact and comfort for American

Indian respondents toward African Americans, Asian Americans and Hispanic Americans were not significant. However, American Indian contact and comfort levels with Caucasian Americans were significantly correlated in all three cases.

Table 25: Significant Correlations of Contact and Comfort: by Ethnicity

Target Group	Respondent Group				
	African American	American Indian	Asian American	Caucasian American	Hispanic American
African American		---	***	***	---
American Indian	***		---	---	---
Asian American	---	---		***	***
Caucasian American	***	***	***		***
Hispanic American	---	---	***	***	

Note: In each group of three symbols, the first place is the correlation with non-peer comfort, second place is the correlation with peer comfort, and the third place is the correlation between contact and overall comfort level.

* significant $p < .05$
 - not significant

Actual correlations appear in Appendix D. The significant correlations ranged from a low of $r = .22$ for

Hispanics toward Asians in non-peer situations to a high of $r = .68$ for Asian Americans toward Caucasian Americans in the peer comfort level situations. Correlations between contact and comfort with Caucasian Americans were positive and significant in every case.

The American Indian subjects' responses were significantly correlated only when responding about Caucasian Americans. There may have been so few significant correlations for this group because only 27 American Indians responded, and statistically it would take a strong relationship to show a significant comparison. Asian American and Caucasian American responses were significantly correlated for all target groups except the American Indians.

Responses correlating contact and comfort with peer groups was more often significant than comparisons with the non-peer group comfort.

In general, these results support the hypothesis that high contact with an ethnic group and a high degree of comfort with that group are significantly correlated. However, the results were not at all consistent in the case of American Indian respondents, nor in the responses of ethnic groups toward American Indians. These correlations do not indicate causation. It cannot be determined whether respondents had more comfort because

they had had more contact or if their greater comfort level led to greater contact with a particular group.

Several students made comments relating comfort to contact. Some of these statements listed in the comfort section above allude to it as well. An Asian American stated,

I feel that one of the successful ways of succeeding in college is to interact with members of the various ethnic groups.

An African American male wrote,

Being that OSU draws a lot of its students from the valley, I think that the majority of students at OSU have not had a close relationship with a minority. This is why I think OSU has poor intercultural relations.

A Hispanic woman wrote,

We have a tendency to prejudge people or groups from what we hear or are told - but once you get to know them you learn a lot about each other.

A Caucasian male explained,

Many of the ethnic groups I am most comfortable with are those I had the most contact with in high school. Unfortunately, lack of familiarity causes distrust.

A Caucasian woman stated, "Because of positive interactions with some Blacks and Asians, I have become more understanding of their races." A Hispanic woman believed, "The less exposure one has to different races, the more apt one is to being racist!"

CHAPTER 5

SUMMARY AND RECOMMENDATIONS

This study had three major purposes: (1) to investigate the amount of self-reported interethnic contact among five major ethnic groups of undergraduate students at Oregon State University (OSU); (2) to examine the comfort level that these groups have with one another; and (3) to determine if contact and comfort levels were significantly related.

The three hypotheses for this study were: (1) There will be no significant differences among any of the ethnic groups in their reported contact with members of the target groups. (2) There will be no significant differences among any of the ethnic groups in their reported comfort level toward any of the target groups. and (3) The greater the respondents' contact score with an ethnic group, the higher the comfort level score on the social scale for that ethnic group. Hypotheses one and two were rejected, because significant differences were found in responses of the respondent ethnic groups toward other ethnic groups. Results showed some support for hypothesis three for all groups but American Indians. Most of the findings for that group were insignificant.

The contact measure combined some elements from the Stanford University study (1989) and a study by Apostle, Glock, Piazza, and Suelzle (1983). Measures included

number of acquaintances, number of friends, duration of interaction, frequency of interaction, and reaction to contact with group members.

The degree of comfort or social distance was measured by a modified version of the Social Scale (Byrnes & Kiger, 1988) and expanded to include five ethnic groups. The scale ranged from one (very uncomfortable) to seven (very comfortable). It included three non-peer role items (President of the United States, counselor, and professor), and three peer items (member of a small group, roommate, and date).

This chapter contains a summary of findings, implications of these findings for student services personnel, and recommendations for future research.

Interethnic Contact

Although ethnic groups were expected to answer similarly with regard to contact among the groups, significant differences among their responses were found. In general, the groups reporting the most contact with African Americans, American Indians, and Hispanic Americans were more likely to be members of these same groups. Findings by item follow.

Number of Acquaintances

Respondents had many Caucasian American acquaintances and very few American Indian acquaintances, and Asian Americans had fewer American Indian acquaintances than

did other groups. Hispanic Americans had more African American acquaintances and vice versa than did other groups.

Number of Friends

As with the number of acquaintances, results showed respondents had more Caucasian American friends than even among their own group. They had the next highest number of friends from among their own group. No significant differences were found in responses toward any of the target ethnic groups.

Duration of Contact

Responses to duration of contact with a person known best in that ethnic group yielded little information. Respondents had known Caucasian Americans longer than they had known American Indians.

Frequency of Contact

The measure of frequency of contact with an ethnic group member again showed that there was little contact with American Indians. Respondents saw them about once a month. Yet, respondents saw Caucasian Americans about once a day.

Asian Americans and Caucasian Americans saw African Americans less often than did other groups. Asian Americans also had less frequent contact with Hispanic Americans than did African Americans and American Indians.

Reaction to Contact with Ethnic Group

Respondents' reactions to the ethnic groups were generally positive. As with other items, many chose to answer "doesn't apply" about American Indians, again showing that respondents had little contact with them. Asian and Hispanic Americans had less positive reactions about contact with American Indians than did other groups.

Summary and Implications

In general, these results showed that contact was greatest with Caucasian Americans and least with American Indians. African and Hispanic Americans tended to have more contact with other minority groups than Asian Americans did. Asian Americans tended to have less contact, and significantly less frequent interaction, with African and Hispanic Americans than did the other minority groups.

In looking at the column of outgroup means for each of the contact items, it is evident that the most frequent contact was with Caucasian Americans, next with Asian Americans, and the other minority groups followed, so that contact with American Indians was least. The pattern followed the demographic composition of the OSU student body - Caucasians being most numerous, Asian Americans next, and other ethnic minorities last.

Because American Indians, African Americans and Hispanic Americans comprised only four percent of the total student population at Oregon State University, the opportunity to interact with them was limited. In addition, African and Hispanic Americans may be more easily identified than American Indians.

The American Indian population is at times almost invisible; almost 40 percent of the undergraduates in this study did not know any American Indians! This compares with 40 percent of the students at Stanford University (1989) who said they had American Indian acquaintances. Some OSU students commented that they didn't even know if they knew any, because they could not tell from outward appearances. OSU (1990) published the fall 1990 population at 238, based on students who identified themselves as "Native American." However, the Affirmative Action Office uses a working figure of 16 percent of 238, or 38 students (Sanford, personal communication, February, 1991). The returns from the "American Indian" sample from this study indicates that the true figure of those identifying themselves as American Indian is closer to half of 238, or 117. Another recent study at OSU (Manuelito-Kerkvliet, 1991) showed there were about 80 American Indians on campus. It is understandable, then, that few students would even know whether they knew any.

Asian American students were more numerous, as their number of 899 represented six percent of the total undergraduate population. Most students had more acquaintances with Asian Americans than with any ethnic groups other than their own and the Caucasian Americans.

However, some students appeared to confuse Asian international students with Asian Americans. One Asian American woman stated that there were "lots of Asians," but "not even 70" Asian American students on campus. Some students mentioned that they had difficulty understanding professors and students who were Asian Americans because of language problems.

Thus, invisibility and/or inability to recognize the groups easily was a problem with regard to American Indians and Asian Americans. Students are unsure who belongs to many of the groups, and may be hesitant to ask.

Comfort Level Among Ethnic Groups

Another purpose of the study was to discover if there were significant differences among ethnic group comfort levels or social distance toward any of the target ethnic groups. Most students felt fairly comfortable with all groups in all situations. A summary of the findings by each scale follows.

Overall Comfort Level

The overall scale was a compilation of means for all six items. When comparing means of responses toward target groups, it is evident that Asian Americans were less comfortable with American Indians. Also, African Americans were less comfortable with Caucasian Americans than were American Indians and Hispanic Americans.

In doing a different comparison, in which the individual responses of each respondent group were compared with one another, the results were even more interesting. All outgroups except African Americans were significantly more comfortable with Caucasian Americans. African and Caucasian Americans were least comfortable with Asian Americans than with the other groups.

Non-peer Comfort Level

The first three items (President of the United States, counselor, and professor) made up the composite non-peer scale. In comparing how groups responded toward individual target groups, results showed again that Asian Americans were less comfortable with American Indians than were Caucasian Americans. In addition, African Americans reported significantly less comfort with Caucasian Americans than did any other outgroup.

When comparing responses of each respondent group, repeated measures tests showed again that all groups except African Americans were most comfortable with

Caucasian Americans. In addition, American Indians were also more comfortable with African Americans. Caucasian Americans were significantly more comfortable with African Americans and American Indians.

For each of the individual items, only the responses toward each target group were compared. Thus, it was shown that of all outgroups, African Americans were significantly less comfortable with a Caucasian American as president, as a counselor, or as a professor.

Asian Americans were less comfortable with African Americans and American Indians as counselors than were some other groups. Caucasian Americans were more comfortable with an American Indian as a professor than were Asian and Hispanic Americans.

Peer Comfort Level

The peer composite scale was comprised of three role situations (as a small group member, roommate and date). The results of this scale yielded results similar to that of the other composite scales. African Americans were significantly less comfortable with Caucasian Americans than were other groups.

In comparing responses of each ethnic group, again, all outgroups except African Americans were most comfortable with Caucasian Americans. In addition, African Americans were significantly least comfortable with Asian Americans and, in turn, Asian Americans were

least comfortable with African Americans. Caucasian Americans were significantly most comfortable with American Indians.

Responses of ethnic groups about target groups were compared for individual peer items. Caucasian Americans were more comfortable with American Indians as small group members than were Asian and Hispanic Americans. Asian Americans were significantly less comfortable with American Indians as roommates than were Caucasian and Hispanic Americans. In addition, African Americans were significantly less comfortable dating Caucasian Americans than were Hispanic Americans.

Implications

Generally, this study was consistent with past research (Bogardus, 1967, 1968; Schaefer, 1987; Sell, 1987) showing that people were more willing to interact with their own group and those similar to themselves.

This study was also consistent with past research (Bogardus, 1967; Minatoya & Sedlacek, 1984) showing that people were more comfortable with outgroup members in more distant situations, such as with a professor, than in roommate or dating situations.

The results of the present study can be placed into the context of Dyer, Vedlitz, Worchel's (1989) three hypotheses concerning the social distance level of minorities toward the majority and other minority groups.

Their first hypothesis was that groups could be prejudiced against or be uncomfortable with all other groups, whether minority or majority. The second was that minorities could adopt the prejudices held by the majority group - viewing the majority group positively and other minority groups negatively. The third hypothesis, which is based on Heider's (1958) balance theory predicted that the minority groups which all experience prejudice and discrimination from the majority group would be attracted to minority groups and reject the majority group.

The present study, as was the case for the Dyer, et al. (1989) study, showed that all groups were fairly accepting of or comfortable with all other groups. Thus there was no strong support for any of the hypotheses. As with their study, it is difficult to determine whether the lack of discomfort with other groups was a measure of greater comfort among groups or simply an unwillingness to report any discomfort.

Dyer et al. (1989) found only one negative score - that for Anglos evaluating marriage with Blacks. They felt that even though there was widespread acceptance of all groups, relative differences among groups were important. The same case can be made with this study.

The current study did not ask about marriage; the closest situation asked about was that of dating. Yet

there were significant differences in how respondents felt about at least one target group in each of the six situations.

As with the Dyer et al. (1989) study, there was some support for the second hypothesis, in that group responses for all minorities except African Americans showed they were significantly more comfortable with Caucasian Americans than with any other outgroup. Unlike the Dyer et al. (1989) study, however, African Americans did not feel more comfortable with Caucasian Americans than with Hispanic Americans or American Indians.

In fact, of all respondent groups, African Americans were the group significantly least comfortable with Caucasian Americans in every case but that of the small group member and roommate. They may have been less comfortable with Caucasian Americans because of racial harassment incidents in Corvallis and on campus (Loew, 1990), which occurred roughly three months prior to the survey and which many felt had not been adequately addressed.

Of all respondent groups, Asian Americans tended to be the least comfortable with other minority groups. They were significantly less comfortable with American Indians and African Americans as counselors and roommates. In the non-peer and overall composite scale, they were also shown to be the group significantly less

comfortable with American Indians. A reason for low Asian American comfort level may be their low contact with others. Another reason could be that they are not comfortable with the cultural differences between the two groups.

Thus, except for the African American responses, this study lends support to the second prediction - that minority groups accept the majority group over other minorities.

The responses of African Americans may lend some support for the third hypothesis based on Heider's (1958) balance theory - that minority groups accept other minorities and reject the majority group. However, in comparing just the African American responses toward each target group on the three composite comfort scales, it was found in two cases that African Americans were least comfortable with Asian Americans, not with Caucasian Americans.

It is rather interesting that repeated measures tests showed that Caucasian Americans ranked African Americans just under American Indians on the non-peer and overall composite comfort scales. Yet African Americans rated Caucasian Americans in the middle of the groups with which they were comfortable.

Correlation Between Contact and Comfort

Results lent support to the third hypothesis of the current study. This hypothesis stated that contact scores with an ethnic group would be highly correlated with comfort level toward that group. This finding was consistent with previous findings (Crull & Bruton, 1979, 1985; Robinson, 1987; O'Driscoll et al., 1983). Significant correlations were found in all but 18 cases of the 60 performed. Every response about Caucasian Americans was positive and significant. All the groups reported high contact with Caucasian Americans and high comfort levels.

Most (15) of the insignificant findings involved American Indians, either as respondents or as the target group. A major reason for insignificant findings may have been the small number of participants which could be used in this analysis. Since only those respondents who reported contact could be used for this analysis and since many respondents had answered "doesn't apply" about several contact items, this caused the number of outgroup respondents to be very small. In addition, there were so few American Indians participating in this study, which may have caused the analysis of contact and comfort of American Indians with other groups to become insignificant.

These significant correlations results do not indicate causation. The respondents may have had a greater comfort level with other ethnic groups because they had had previous contact with these groups. Conversely, they may have had more contact with the groups due to a high degree of comfort gained through previous experience and education, including their families' influence.

Comparisons Based on Gender

Although this study did not predict differences based upon gender, these analyses were performed, and some interesting results ensued.

Men and women did not report much difference in contact with the different ethnic groups. Men had significantly more Asian American acquaintances. Women had a more positive reaction toward contact with African Americans.

Consistent with the findings of Crull and Bruton (1985) and Robinson (1987) with regard to comfort level, women were more comfortable than men in nearly every case (except dating). They were significantly more comfortable with African Americans on the non-peer composite scale, and with African American counselors, professors and small group members. They were also more comfortable with Hispanic Americans as roommates.

Men, however, were more comfortable in dating outside their ethnic group. They were significantly more comfortable dating Asian Americans and Hispanic Americans. In addition, in dating Caucasian Americans, there were significant differences within ethnic group by gender. Hispanic and African American women were less comfortable dating Caucasian Americans than were men, but for American Indians and Asian Americans, the situation was reversed.

It is interesting that Bogardus (1968) predicted that as women's opportunities for contact increased, so would their comfort level with other groups. Yet, there was little if any difference in reported interethnic contact between men and women, and women were still more comfortable with other groups! Dating was the exception. Perhaps, being seen as a partner with someone of a different ethnic group is more uncomfortable for women of some ethnic groups than for others.

Another explanation for men's lesser comfort with others may be that men are uncomfortable in situations in which they experience less power. Male students have less control over the non-peer situations, and may find this more upsetting than women who may be more accustomed to accommodation.

In the dating situations, men typically experience more control; they ask the women to accompany them to a

place and situation in their own culture. A woman who dates outside her own group must adjust and or accommodate to that man's environment. She may risk having her cues misread, and may feel more vulnerable than she would within her own group, where both men and women know the cultural norms for dating, and where the men should at least understand her intentions. Men may realize this, and may wish to take advantage of this extra advantage as well, especially if they believe women in one culture may be more willing to accommodate their wishes.

Directions for Future Research

The findings of this study indicate that contact and comfort may be positively related for all groups but American Indians. Before these findings can be applied to the university environment, however, there are several limitations which must be addressed.

Since this study was limited to Oregon State University undergraduates in a cross-sectional study, results should be cautiously generalized. Universities in similar rural surroundings with similar student bodies will find this study of more use than those with larger minority populations. This study should be replicated at other colleges and universities with similar demographic compositions to determine if results may be generalized.

Due to the small number of American Indians in the sample, the confusion over self-identifying as "Native American" versus "American Indian," and the insignificant results concerning this group, much more research involving this group needs to be conducted. If many other institutions also over-report their American Indian student populations, the national figures actually may be much lower than presently believed. Even with the inflated figures, the literature declaims the abysmally low number of American Indians. Thus, the crisis may be much worse!

Another limitation concerns quantitative research in general. Perhaps a better method of investigating contact and social distance among ethnic groups would be to interview students in depth in a qualitative study. The current study was cross-sectional, providing a snapshot of a group of students at a certain time; a quasi-experimental longitudinal study may show a more direct relationship between contact and social distance. Several students in the current study mentioned difficulty in categorizing friends and acquaintances. Students of mixed heritage do not fit into categories easily, and age, class, and gender also affect attitudes.

There was a great deal of heterogeneity among the various ethnic groups. Intergroup comparison studies involving more students which would allow differences

among subgroups to emerge are needed. For example, Hispanic Americans are often defined as including Mexican Americans who grew up in Mexico as well as those whose families have been here for centuries, those of Caribbean descent, Puerto Ricans, and Central and South Americans. American Indians include people from many different tribal communities and cultural backgrounds as well. In addition, the Asian American category includes everyone from the Pacific Islands west to the Middle-Eastern countries. It comprised those of second or third generation Chinese and Japanese as well as recent immigrants from southeast Asia.

Very little research has been conducted in social distance with Asian Americans. In this study, they comprised two percent more of the student body than all the other domestic ethnic groups combined. Although they are not considered underrepresented in many of the Western states, they may be considered a targeted minority in some regions and at some institutions. It would be interesting to note differences in their contact and comfort level with other minority groups as percentages of Asian Americans fluctuate.

An interesting preliminary finding which should be examined further was that all groups reported the least comfort with Asian Americans, though differences in their responses toward this group and others was not

significant except for African Americans and Caucasian Americans. In repeated measures tests, African Americans reported significantly less comfort with Asian Americans in overall and peer composite scales. Caucasian Americans also reported less comfort with Asian Americans in overall scores. If the Asian American group were broken into subgroups, the findings may change dramatically. For example, people may be more uncomfortable with a recent immigrant from Southeast Asia than with a third generation Chinese or Japanese American.

Another interesting difference shown in the tables but not fully examined in this research were comparisons of differences in how one group answered about another, and vice versa. For instance, were African Americans less comfortable with Caucasian Americans than vice versa?

In comparing means, the present study seemed consistent with the findings of the Wilson (1986) and Tuch (1988) studies, which showed that whites were less comfortable with the minority groups than the minority groups were with them. In the current study, that comparison was true for every case but African Americans. They reported lower mean comfort levels with Caucasian Americans (in all cases but the dating situation) than vice versa. In the dating situation, although African

Americans were the group least comfortable dating Caucasian Americans, their response mean was still higher than that of Caucasian Americans toward dating African Americans.

Finally, more research into differences between men and women would be helpful, especially those which compare ethnic group by gender. It may be that men and women from the same ethnic group feel differently about close social contact, such as interethnic dating or marriage than about more distant relationships. The current study indicated that although men felt less comfortable in more distant relationships, they were more comfortable in dating relationships than many women. The sense of power or control in the situation may be a factor. More research in this area is needed.

Conclusions

Across the country, colleges and universities are including a commitment to greater diversity among institutional goals. An assessment of the current situation with regard to students' interaction with people of color already on college campuses is necessary in planning the future of ethnic relations.

Student affairs practitioners must be aware of the amount of actual interaction among the groups and how comfortable these groups are in interacting before designing the best programs to meet these needs. This

study was such an effort. It provides some baseline data so that once programs are in place, comparisons can be made to see if changes in interaction or social distance have occurred. For example, at OSU, a new mandatory multiculturalism course was scheduled to begin one and a half years after the completion of this study. Another such study two or three years after the course has been instituted would be helpful in determining its effectiveness in improving ethnic relations. Naturally, longitudinal data would be better than another cross-sectional study because it would show differences in the student body over time and give a partial clue about changes in the campus environment.

Programs encouraging students to interact should be conducted outside the classroom as well. Well over half of every group but Caucasian Americans and Asian Americans in this study report involvement in at least one campus organization, though it is unclear how much time they actually spend with these groups, or what the ethnic makeup of the group may have been. The students of color indicated involvement in many organizations which were of general interest, not simply involvement in ethnic groups. This was encouraging. Some students commented that there need to be more functions in and out of the classroom which encourage interaction. If more students of various groups worked cooperatively toward

common goals, perhaps the amount of contact with the less populous groups would increase, and the comfort level among the groups would also rise.

This study pointed out a number of concerns at Oregon State University; other colleges and universities may be experiencing similar difficulties, and may wish to be alerted to them.

First, the number of American Indians on campus is cause for some concern. Not only is it unclear exactly how many American Indians are attending; it is also noteworthy that fewer people know any American Indians than African Americans, and there are supposedly more American Indians on campus than African Americans. If the university is to become more multicultural, more American Indians must be recruited and retained ... and identified!

It is also noteworthy that preliminary findings show the largest minority group on the OSU campus - the Asian Americans - are least comfortable with other minority groups and that some groups are significantly less comfortable with them. Because they are not "underrepresented" in Oregon, little attention may have been paid to their special concerns. Research with this diverse group should be conducted determine if students are uncomfortable with only a few subgroups or with the entire group. In addition, it is unclear why so many

students appear to confuse Asian Americans with Asian international students. There seemed to be less comfort and some animosity toward Asians in general. The reasons are unclear, but it could signal a cause for concern.

One student queried "What will you do with [this survey]? How will you integrate student organizations?" That is the challenge student affairs practitioners face. What this survey showed was in part expected; little contact with some of the least populous groups takes place, because there is little opportunity; contact and comfort level are positively correlated. Colleges and universities must provide the opportunity for positive interaction with a diverse group of people: by recruiting and retaining students, staff and faculty of color, by ensuring the availability of cultural groups and centers, and by encouraging diverse student and faculty involvement providing them the chance to work cooperatively on projects. In short, they must strive toward multiculturalism, and include diverse groups in all aspects of the institution.

REFERENCES

- Allport, G. W. (1954). The nature of prejudice. Cambridge, MA: Addison-Wesley.
- Almanac. (1990, September 5). The Chronicle of Higher Education. Washington, D.C., pp. 3, 15.
- Amir, Y. (1976). The role of intergroup contact in change of prejudice and ethnic relations. In P. A. Katz (Ed.), Towards the elimination of racism. New York: Pergamon Press, Inc.
- Apostle, R. A., Glock, C. Y., Piazza, T., & Suelzle, M. (1983). The anatomy of racial attitudes. Berkeley: University of California Press.
- Armstrong-West, S., & de al Teja, M. H. (1988). Social and Psychological factors affecting the retention of minority students. In M. C. Terrell & D. J. Wright (Eds.), From survival to success: Promoting minority student retention (pp. 25-53). Washington, D.C.: National Association of Student Personnel Administrators, Inc.
- Barnhouse, B. (1990). Enrollment summary: Fall term 1990. (Institutional Research and Planning, No. 2, December). Corvallis, OR: Oregon State University.
- Bogardus, E. S. (1925). Social distance and its origins, Sociology and Social Research, 9, 216-225.
- Bogardus, E. S. (1928). Immigration and race attitudes. Boston: Heath.
- Bogardus, E. S. (1967). A forty-year racial distance study. Los Angeles: University of Southern California Press.
- Bogardus, E. S. (1968). Comparing racial distance in Ethiopia, South Africa, and the United States. Sociology and Social Research, 52(2), 149-156.
- Boyer, E. L. (Ed.) (1987). College: The undergraduate experience in America. New York: Harper and Row.
- Boyer, E. L. (Ed.) (1990). Campus life: In search of community. Lawrenceville, NJ: Princeton University Press

- Braddock, J. H. (1979). The perpetration of segregation across levels of education: A behavioral assessment of the contact hypothesis. Baltimore, MD: Center for Social Organization of Schools).
- Byrnes, D. A., & Kiger, G. (1988). Contemporary measures of attitudes toward blacks. Educational and Psychological Measurement, 48, 107-118.
- Cook, S. W. (1962). The systematic analysis of socially significant events: A strategy for social research. Journal of Social Issues, 18, 66-84.
- Cook, S. W. (1978). Interpersonal and attitudinal outcomes in cooperating interracial groups. Journal of Research and Development in Education, 12(1), 97-113.
- Crull, S. R., & Bruton, B. T. (1979). Bogardus social distance in the 1970's. Sociology and Social Research, 63(4), 771-783.
- Crull, S. R., & Bruton, B. T. (1985). Possible decline in tolerance toward minorities: Social distance on a midwest campus. Sociology and Social Research, 70(1), 57-60.
- Dalton, J. (1991). Telephone survey on interracial conflict. Paper presented at the meeting of National Association of Student Personnel Administrators, Washington, D.C.
- Dalton, J.C., Barnett, D. C., & Healy, M. (1982). Educational approaches to values development in college students: A survey of NASPA chief student personnel administrators. NASPA Journal, 20(1), 14-21.
- Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: John Wiley & Sons.
- Dyer, J., Vedlitz, A., & Worchel, S. (1989). Social distance among racial and ethnic groups in Texas: Some demographic correlates. Social Science Quarterly, 70(3), 607-616.
- Evangelauf, J. (1990). 1988 Enrollments of all racial groups hit record levels. The Chronicle of Higher Education, 36(30), pp. A1, A37.

- Fagan, J., & O'Neill, M. (1965). A comparison of social-distance scores among college-student samples. Journal of Social Psychology, 66, 281-290.
- Gray, J. S., & Thompson, A. H. (1953). The ethnic prejudices of white and negro college students. Journal of Abnormal and Social Psychology, 48, 311-313.
- Harris, L. (1988). 2001: The world our students will enter. The College Board Review No. 150, Winter 1988-89.
- Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.
- Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the "contact hypothesis." In M. Hewstone & R. Brown (Eds.), Contact and conflict in intergroup encounters (pp. 1-44). New York: Basil Blackwell.
- Hobson-Panico, P. (1990). A Survey of Colorado University-Boulder Undergraduate Students, Spring Term, 1990. Paper presented at the 3rd Annual National Conference on Racial and Ethnic Relations in American Higher Education, Santa Fe, New Mexico.
- Jackman, M. R., & Crane, M. (1986). "Some of my best friends are black..." Interracial friendship and whites' racial attitudes. Public Opinion Quarterly, 50, 459-486.
- Kim, B., Mendoza, J., Porter, D., & Woodward, D. (1989). Student life addendum. In University Committee on Minority Issues, Stanford University (Ed.), Building a multiracial, multicultural university community (pp. 237-240). Palo Alto, CA: Stanford University.
- Kuh, G. D., Krehbiel, L. E., & MacKay, K. (1988). Personal development and the college student experience: A review of the literature. Report prepared for the College Outcomes Evaluation Program New Jersey Department of Higher Education, Trenton, NJ.
- Li, W. L., & Yu, L. (1974). Interpersonal contact and racial prejudice: A comparative study of American and Chinese students. The Sociological Quarterly, 15, 559-566.

- Loew, T. (1990, October 24). Protests racial bigotry: Black cultural center will close. The Daily Barometer, pp. 1-2.
- MacKenzie, B. K. (1948). The importance of contact in determining attitudes toward negroes. Journal of Abnormal and Social Psychology, 43, 417-441.
- Manuelito-Kerkvliet, C. (1991). Native American enrollment at Oregon State University: Fall 1988 - present. Unpublished manuscript.
- McClendon, M. J. (1974). Interracial contact and the reduction of prejudice. Sociological Focus, 7, 47-65.
- McClelland, K. E., & Auster, C. J. (1990). Public platitudes and hidden tensions: Racial climates at predominantly white liberal arts colleges. Journal of Higher Education, 61, 607-642.
- McConahay, J. (1978). The effects of school desegregation upon students' racial attitudes and behavior: A critical review of the literature and a prolegomenon to future research. Law and Contemporary Problems, 42(3), 78-107.
- McConahay, J. B. (1986). Modern racism, ambivalence, and the modern racism scale. In J. F. Dovidio & S. L. Gaertner (Eds.), Prejudice, discrimination, and racism (pp. 91-126). New York: Academic Press.
- McHugh, B., Dalton, J., Henley, B., & Buckner, D. (1988). Racial discrimination on campus. DeKalb, IL: NASPA.
- Minatoya, L. Y., & Sedlacek, W. E. (1984). Assessing attitudes of white university students toward blacks in a changing context. Journal of Non-White Concerns in Personnel and Guidance, 12, 69-79.
- Muir, D. E. (1989). "White" attitudes toward "blacks" at a deep-south university campus, 1963-1988. Sociology and Social Research, 73(2), 84-89.
- Muir, D. E., & McGlamery, C. D. (1984). Trends in integration attitudes on a deep-south campus during the first two decades of desegregation. Social Forces, 62(4), 963-972.
- Neumeyer, M. H. (1974). Obituary for Emory S. Bogardus. Sociological Inquiry, 44(1), 3-5.

- Odell, M., & Mock, J. J. (1989). A crucial agenda: Making colleges and universities work better for minority students. Boulder, CO: Western Interstate Commission for Higher Education.
- O'Driscoll, M., Haque, A., & Ohsako, T. (1983). Effects of contact and perceived attitudes differences on social distance among Australian, Japanese, and Pakistani students. The Journal of Social Psychology, 120, 163-168.
- Owen, C. A., Eisner, H. C., & McFaul, T. R. (1981). A half-century of social distance research: National replication of the Bogardus' studies. Sociology and Social Research, 66(1), 81-98.
- Park, B., & Rothbart, M. (1982). Perception of out-group homogeneity and levels of social categorization: Memory for the subordinate attributes of in-group and out-group members. Journal of Personality and Social Psychology, 42(6), 1051-1068.
- Park, R. (1924). The concept of social distance. Journal of Applied Sociology, 8, 339-344.
- Pass, M. G. (1987). Prison inmates express less social distance from minorities than do college students. Sociology and Social Research, 71(3), 209-210.
- Payne, W. J. (1976). Social class and social differentiation: A case for multidimensionality of social distance. Sociology and Social Research, 61(1), 54-67.
- Payne, M. C. Jr., York, C. M., & Fagan, J. (1974). Changes in measured social distance over time. Sociometry, 37(1), 131-136.
- Pemberton, G. (1988). On teaching the minority student: problems and strategies. Brunswick, ME: Bowdoin College.
- Pettigrew, T. F. (1979). The ultimate attribution error: Extending Allport's cognitive analysis of prejudice. Personality and Social Psychology Bulletin, 5(4), 461-476.
- Pettigrew, T. F. (1982). Prejudice. In T. F. Pettigrew, G. M. Fredrickson, D. T. Knobel, N. Glazer, & R. Ueda (Eds.), Prejudice (pp. 1-29). Cambridge, MA: Belknap Press.

- Pinkney, A. (1961). The anatomy of prejudice: Majority group attitudes toward minorities in selected American cities (Doctoral dissertation, Cornell University, 1961). Dissertation Abstracts International, 22, 2907-8.
- Rapp, A. (1982). Prejudice and discrimination among community college students. Community College Social Science Journal, 4(3), 63-66.
- Ray, J. J. (1983). Racial attitudes and the contact hypothesis. The Journal of Social Psychology, 119, 3-10.
- Riordan, C. (1978). Equal-status interracial contact: A review and revision of the concept. International Journal of Intercultural Relations, 2, 161-85.
- Robinson, P. J. (1987). The relationship between favorable or unfavorable contact on the social distance attitudes of residence hall students toward residential subgroups (Doctoral dissertation, Iowa State University, 1987). Dissertation Abstracts International, 49(03A), 444.
- Rothbart, M., & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. Journal of Social Issues, 41(3), 81-104.
- St. John, N. H. (1975). School desegregation: Outcomes for children. New York: Wiley.
- Sampson, W. A. (1986). Desegregation and racial tolerance in academia. Journal of Negro Education, 55(2), 171-184.
- Sayler, R. I. (1969). An exploration of race prejudice in college students and interracial contact (Doctoral dissertation, University of Washington, 1969). Dissertation Abstracts International, 30, 2620A.
- Schaefer, R. T. (1987). Social distance of black college students at a predominantly white university. Sociology and Social Research, 72(1), 30-32.
- Schuman, H., Steeh, C., & Bobo, L. (1985). Racial attitudes in America: Trends and interpretations. Cambridge, MA: Harvard University Press.
- Scott, R. R. (1979). National comparisons of racial attitudes of segregated and desegregated students.

- (Baltimore, MD: Center for Social Organization of Schools).
- Sedlacek, W. E., & Brooks, G. C., Jr. (1970). Measuring racial attitudes in a situational context. Psychological Reports, 27, 971-980.
- Sedlacek, W. E., & Brooks, G. C., Jr. (1976). Racism in American education: A model for change. Chicago: Nelson-Hall.
- Sedlacek, W. E., Brooks, G. C., Jr., & Mindus, L. A. (1973). Racial attitudes of white university students and their parents. Journal of College Student Personnel, 14, 517-520.
- Sell, R. R. (1987). International social distances of students at Egyptian elite universities. Sociology and Social Research, 72, 62-66.
- Sherif, M. (1953). Groups in harmony and tension: An integration of studies on intergroup relations. New York: Harper & Brothers.
- Sinha, A. K., & Upadhyaya, O. P. (1962). Eleven ethnic groups on a social distance scale. The Journal of Social Psychology, 57, 49-54.
- Smith, T. W., & Dempsey, G. R. (1983). The polls: Ethnic social distance and prejudice. Public Opinion Quarterly, 47, 584-600.
- Sniderman, P. M., & Tetlock, P. E. (1986). Symbolic racism: Problems of motive attribution in political analysis. Journal of Social Issues, 42(2), 129-150.
- Spangenberg, J., & Nel, E. M. (1983). The effect of equal status contact on ethnic attitudes. The Journal of Social Psychology, 121, 173-180.
- Stanford University. (1989). Final report of the university committee on minority issues: Building a multiracial, multicultural university community. Palo Alto, CA: Author.
- Stephan, W. G. (1985). Intergroup relations. In G. Lindzey & E. Aronson, (Eds.), The handbook of social psychology, Vol. II (pp. 559-659). Reading MA: Addison-Wesley.

- Stephan, W. G., & Brigham, J. C. (1985). Intergroup contact: Introduction. Journal of Social Issues, 41(3), 1-8.
- Stephan, W. G., & Rosenfield, D. (1978). Effects of desegregation on racial attitudes. Journal of Personality and Social Psychology, 36(8), 795-802.
- Tajfel, H. (1978). Interindividual behaviour and intergroup behaviour. In H. Tajfel (Ed.), Differentiation between social groups: Studies in social psychology of intergroup relations. London: Academic Press.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worcherl & W. Austin (Eds.), The psychology of intergroup behavior, (pp. 7-24), Chicago: Nelson-Hall.
- Talley, K. S. (1981). Desegregated education: Implications for achievement, self image and racial prejudice (Doctoral dissertation, Northwestern University, 1981). Dissertation Abstracts International, 42(05A), 2313.
- Triandis, H. C., & Davis, E. (1965). Race and belief as determinants of behavioral intentions. Journal of Personality and Social Psychology, 2, 715-725.
- Tuch, S. A. (1988). Race differences in the antecedents of social distance attitudes. Sociology and Social Research, 72(3), 181-184.
- van der Berghe, P. (1962). Race attitudes in Durban, South Africa. Journal of Social Psychology, 57, 55-72.
- Weber, R., & Crocker, J. (1983). Cognitive processes in the revision of stereotypic beliefs. Journal of Personality and Social Psychology, 45, 961-977.
- Westie, F. R. (1953). A technique for the measurement of race attitudes. American Sociological Review, 18, 73-78.
- White, T. J., & Sedlacek, W. E. (1987). White students attitudes toward blacks and hispanics: Programming implications. Journal of Multicultural Counseling and Development, 15(4), 171-183.
- Wiener, J. (1989). Reagan's children: Racial hatred on campus. The Nation, February 27, p. 260.

- Wilder, D. A. (1984). Intergroup contact: The typical member and the exception to the rule. Journal of Experimental Social Psychology, 20, 177-194.
- Wilson, R. (1990). New white-student unions on some campuses are sparking outrage and worry. The Chronicle of Higher Education, 36(31), April 18, p. A1.
- Wilson, T. (1986). The asymmetry of racial distance between blacks and whites. Sociology and Social Research, 72(2), 161-163.
- Winer, B. J. (1971). Statistical principles in experimental design (2nd ed.). New York: McGraw Hill.
- Wolfman, B. R. (1990). College leaders must act firmly to end racial resegregation on their campuses. The Chronicle of Higher Education, 37(2), p. B1-B3.
- Woodard, D. (1990, October 5). Campus responses to racial harassment and intimidation. Remarks made at the NASPA Teleconference, Oklahoma State University, Stillwater, OK.

APPENDICES

APPENDIX A

PILOT STUDY QUESTIONNAIRE

DIVERSITY QUESTIONNAIRE

The following questions ask about your background and the amount of contact you have with a variety of people. Some questions will ask about how you feel about interacting with people from different racial/ethnic groups. Your answers will help us learn more about issues of diversity at Oregon State University.

BACKGROUND INFORMATION: Please check the category that fits you. The following questions are information we think will be useful in interpreting your responses.

Gender: ___ Male ___ Female

Age: ___ 17-19 ___ 20-23 ___ 24-30 ___ over 31

Racial/Ethnic Background: (Please note, I do not wish to offend anyone, so I've tried to include the appropriate names for these groups. Throughout the survey, I have used the first name listed here.)

- ___ African/Black American
- ___ American Indian/Native American/Alaskan Native
- ___ Asian American
- ___ Caucasian/White American
- ___ Hispanic/Latino/a American (includes those of Latin American or Central American descent, and Puerto Rican, Cuban, or Mexican)

High school attended: _____(city)

Where do you live?

___ Cooperative ___ Residence Hall ___ Apartment
or house
___ Fraternity or Sorority ___ With
parents

OSU class: ___ Freshman ___ Sophomore
 ___ Junior ___ Senior

What is your Major? _____

What is your political orientation?

___ Far left ___ Liberal ___ Middle of the road
___ Conservative ___ Far Right

Please list any student organizations you belong to:

THE NEXT SET OF QUESTIONS ASKS ABOUT HOW MUCH CONTACT YOU HAVE WITH A VARIETY OF DIFFERENT PEOPLE. I REALIZE IT IS OFTEN HARD TO REMEMBER, BUT PLEASE TRY TO ANSWER AS BEST YOU CAN.

Please record the number of people you know well enough to say hi to from among the following groups.

African American	_____
American Indians	_____
Asian Americans	_____
Caucasians Americans	_____
Hispanics/Latino	_____

Now think about your associations with people you know or have ever known who are members of these groups. How would you rate your associations with these people generally? Please circle your response for each group:

1	2	3	4	5		
very positive	positive	OK	somewhat negative	very negative		
	Asian Americans	1	2	3	4	5
	African Americans	1	2	3	4	5
	American Indians	1	2	3	4	5
	Hispanic Americans	1	2	3	4	5
	Caucasian Amricans	1	2	3	4	5

Now think of your friends, the people you can share your emotions and feelings with. Do you have any friends from among the following groups? If yes, please list how many.

African American	_____	no	_____	(number of friends)
Caucasian American	_____	no	_____	(number of friends)
American Indian	_____	no	_____	(number of friends)
Hispanic/Latino	_____	no	_____	(number of friends)
Asian American	_____	no	_____	(number of friends)

Now think about the **person you know best** (not necessarily a friend) from each group. How long have you known that person who is

African American?

1. less than 6 months
2. between 6 months and a year
3. over a year

Asian American?

1. less than 6 months
2. between 6 months and a year
3. over a year

Caucasian American?

1. less than 6 months
2. between 6 months and a year
3. over a year

Hispanic/Latino American?

1. less than 6 months
2. between 6 months and a year
3. over a year

American Indian?

1. less than 6 months
2. between 6 months and a year
3. over a year

How often do you see the **person you know best** who is:
(Circle the number)

African American?

1. at least once a week
2. at least once every 2 weeks
3. about once a month
4. less than once a month

American Indian

1. at least once a week
2. at least once every 2 weeks
3. about once a month
4. less than once a month

Caucasian American

1. at least once a week
2. at least once every 2 weeks
3. about once a month
4. less than once a month

Hispanic/Latino American

1. at least once a week
2. at least once every 2 weeks
3. about once a month
4. less than once a month

Asian American

1. at least once a week
2. at least once every 2 weeks
3. about once a month
4. less than once a month

The next set of questions asks how comfortable you would be in various situations. Please assign the whole number (1-7) from the scale below that best describes the level of comfort you would feel with each of the following situations for each of the different ethnic groups. Please place a number on each line.

Very Uncomfortable		Very Comfortable
1	2 3 4 5	6 7

- | | |
|--|--|
| <p>1. As governor of my state.</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>3. As my personal physician</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>5. As my roommate</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>7. As a dance partner</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>9. As a member of my small group in classroom/group activities</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> | <p>2. As President of the U.S.</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>4. As my spiritual counselor</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>6. As someone I would date</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> <p>8. As my professor</p> <p>___ African American</p> <p>___ Asian American</p> <p>___ American Indian</p> <p>___ Hispanic/Latino</p> <p>___ Caucasian</p> |
|--|--|

APPENDIX B

SURVEY INSTRUMENT

Social Interaction at Oregon State University

1. Acquaintances are an important aspect of social life, so the first question asks about how much contact you have with people from different groups. Please indicate the number of people you know well enough to say "Hi" to from among the following groups. (Circle one number for each.)

Number of Acquaintances

	NONE	ONE TO FIVE	SIX TO TEN	MORE THAN TEN
a. African Americans	1	2	3	4
b. American Indians	1	2	3	4
c. Asian Americans	1	2	3	4
d. Caucasian Americans	1	2	3	4
e. Hispanic Americans.....	1	2	3	4

2. Next, we are interested in knowing how often you actually interact with people from these various groups. How often do you talk to or do an activity with anyone from each of the following groups for more than 15 minutes? (Circle the number for each.)

	ONCE A DAY	ONCE A WEEK	ONCE A MONTH	RARELY	DOESN'T APPLY
a. African Americans.....	1	2	3	4	5
b. American Indians.....	1	2	3	4	5
c. Asian Americans.....	1	2	3	4	5
d. Caucasian Americans...	1	2	3	4	5
e. Hispanic Americans.....	1	2	3	4	5

3. The next question asks how you feel about your interactions with members of these groups. Please think about your associations with people you know or have ever known who are members of these racial/ethnic groups. How would you rate your associations with these people generally? (Circle one number for each.)

Rate your feelings about your contact with

	VERY POSITIVE	SOMEWHAT POSITIVE	NEUTRAL	SOMEWHAT NEGATIVE	VERY NEGATIVE	DOESN'T APPLY
a. African Amer....	1	2	3	4	5	6
b. Amer. Indians...	1	2	3	4	5	6
c. Asian Americans.	1	2	3	4	5	6
d. Caucasian Amer..	1	2	3	4	5	6
e. Hispanic Amer...	1	2	3	4	5	6

(PLEASE TURN THE PAGE)

4. Now we would like to ask about your friendships with those in other groups. By friends, we mean the people you can share your emotions and feelings with. About how many individuals of each group, if any, do you consider a friend? (If none, please write "0.")

NUMBER OF FRIENDS

- a. African Americans..... _____
- b. American Indians _____
- c. Asian Americans _____
- d. Caucasian Americans..... _____
- e. Hispanic Americans..... _____

5. Now, please think about the person you know best, if any, from each group. This could be a friend, but may be an acquaintance. How long have you known that person? (Circle one number for each.)

Length of time known

	LESS THAN SIX MON.	SIX MONTHS TO ONE YR.	OVER A YEAR	DOESN'T APPLY
a. African American.....	1	2	3	4
b. American Indian.....	1	2	3	4
c. Asian American.....	1	2	3	4
d. Caucasian American....	1	2	3	4
e. Hispanic American.....	1	2	3	4

Questions 6-11 ask how comfortable you would be in various situations. Please rate your level of comfort with each of the following situations on a scale from 1 to 7, where "1" is Very Uncomfortable, and "7" is Very Comfortable. Do not give your reaction to the best or worst members you have known. (Please circle one number for each ethnic group.)

VERY UNCOMFORTABLE	VERY COMFORTABLE
-----------------------	---------------------

6. As President of the U.S.:

a. African American....	1	2	3	4	5	6	7
b. American Indian.....	1	2	3	4	5	6	7
c. Asian American.....	1	2	3	4	5	6	7
d. Caucasian American....	1	2	3	4	5	6	7
e. Hispanic American....	1	2	3	4	5	6	7

(PLEASE GO ON TO THE NEXT PAGE)

VERY UNCOMFORTABLE

VERY COMFORTABLE

7. As my counselor:

a. African American....	1	2	3	4	5	6	7
b. American Indian.....	1	2	3	4	5	6	7
c. Asian American.....	1	2	3	4	5	6	7
d. Caucasian American...	1	2	3	4	5	6	7
e. Hispanic American....	1	2	3	4	5	6	7

8. As my professor:

a. African American....	1	2	3	4	5	6	7
b. American Indian.....	1	2	3	4	5	6	7
c. Asian American.....	1	2	3	4	5	6	7
d. Caucasian American...	1	2	3	4	5	6	7
e. Hispanic American....	1	2	3	4	5	6	7

9. As a member of my small group
in classroom/group activities:

a. African American....	1	2	3	4	5	6	7
b. American Indian.....	1	2	3	4	5	6	7
c. Asian American.....	1	2	3	4	5	6	7
d. Caucasian American...	1	2	3	4	5	6	7
e. Hispanic American....	1	2	3	4	5	6	7

10. As my roommate:

a. African American....	1	2	3	4	5	6	7
b. American Indian.....	1	2	3	4	5	6	7
c. Asian American.....	1	2	3	4	5	6	7
d. Caucasian American...	1	2	3	4	5	6	7
e. Hispanic American....	1	2	3	4	5	6	7

11. As someone I would date:

a. African American....	1	2	3	4	5	6	7
b. American Indian.....	1	2	3	4	5	6	7
c. Asian American.....	1	2	3	4	5	6	7
d. Caucasian American...	1	2	3	4	5	6	7
e. Hispanic American....	1	2	3	4	5	6	7

BACKGROUND INFORMATION: Responses to the following questions will help us interpret the survey results.

12. Please give the name of the high school you attended, and the city and state, or country.

 (SCHOOL)

 (CITY, STATE, COUNTRY)

(PLEASE TURN THE PAGE)

13. Please list any student organizations at OSU to which you belong:

14. Your Gender. (Circle one number.)

- 1 MALE
- 2 FEMALE

15. How old are you?

_____ AGE

16. Which of the following best describes your racial or ethnic identification? (Circle one number.)

- 1 AFRICAN/BLACK AMERICAN
- 2 AMERICAN INDIAN/NATIVE AMERICAN/ALASKAN NATIVE
- 3 ASIAN AMERICAN/PACIFIC ISLANDER
- 4 CAUCASIAN/WHITE AMERICAN
- 5 HISPANIC, LATINO/A AMERICAN (INCLUDES THOSE OF LATIN AMERICAN OR CENTRAL AMERICAN DESCENT, AND PUERTO RICAN, CUBAN, OR MEXICAN)
- 6 OTHER (SPECIFY _____)

17. Where do you live? (Circle one number.)

- 1 COOPERATIVE
- 2 RESIDENCE HALL
- 3 APARTMENT OR HOUSE
- 4 FRATERNITY OR SORORITY
- 5 WITH PARENTS

18. What was your OSU class standing as of January 1, 1991? (Circle one number.)

- 1 FRESHMAN
- 2 SOPHOMORE
- 3 JUNIOR
- 4 SENIOR
- 5 OTHER (SPECIFY _____)

19. What is your Major?

_____ MAJOR

20. Is there anything else you would like to say about your interaction with these ethnic groups on campus? (Please attach a separate page if necessary.)

Thank you very much for your time. Please mail this back in the envelope provided.

APPENDIX C

LETTERS AND RESPONSE MATERIALS

January 24, 1991

Dear Student:

Social life has been found to be a key ingredient in the overall success of college students. To find out more about this, we need additional information about students' behavior and attitudes. Thus, we need your help. This information will assist OSU to develop programs to aid in increasing student interaction. Shahid Yusaf, President of Associated Students of Oregon State University, is supportive of this research.

You have been selected as one of a few students being asked to give information about your interactions with various groups. Your thoughts will represent those of many other students whom we could not ask. In order for the results to truly represent the thinking of undergraduates at OSU, it is important that each survey be completed and returned.

Your response will be completely confidential. Your name will never be placed on the survey, so there will be no way to associate your name with your responses. All personal information will be summarized as group information only. The identification number on the front is for mailing purposes only, so that your name may be checked off the list when your survey is returned.

To return the survey, please place it in the reply envelope and send it through campus mail or through the regular post office. If you live in a residence hall, you may place it in campus mail at your front desk. Your cooperation and participation is greatly appreciated. I will be happy to answer any questions. Please call me at 752-4136.

Thank you for your assistance.

Sincerely,

Sue Adams
Graduate Student

Jeff Boyd
Student Activities
Program Advisor

January 24, 1991

Dear Student:

Social life has been found to be a key ingredient in the overall success of college students. To find out more about this, we need additional information about students' behavior and attitudes. Thus, we need your help. This information will assist OSU to develop programs to aid in increasing student interaction. Shahid Yusaf, President of Associated Students of Oregon State University, and Yvette Woods, President of United Black Student Association, are supportive of this research.

You have been selected as one of a few students being asked to give information about your interactions with various groups. Your thoughts will represent those of many other students whom we could not ask. In order for the results to truly represent the thinking of undergraduates at OSU, it is important that each survey be completed and returned.

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January 24, 1991

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You have been selected as one of a few students being asked to give information about your interactions with various groups. Your thoughts will represent those of many other students whom we could not ask. In order for the results to truly represent the thinking of undergraduates at OSU, it is important that each survey be completed and returned.

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Thank you for your assistance.

Sincerely,

Sue Adams
Graduate Student

Jeff Boyd
Student Activities
Program Advisor

January 24, 1991

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You have been selected as one of a few students being asked to give information about your interactions with various groups. Your thoughts will represent those of many other students whom we could not ask. In order for the results to truly represent the thinking of undergraduates at OSU, it is important that each survey be completed and returned.

Your response will be completely confidential. Your name will never be placed on the survey, so there will be no way to associate your name with your responses. All personal information will be summarized as group information only. The identification number on the front is for mailing purposes only, so that your name may be checked off the list when your survey is returned.

To return the survey, please place it in the reply envelope and send it through campus mail or through the regular post office. If you live in a residence hall, you may place it in campus mail at your front desk. Your cooperation and participation is greatly appreciated. I will be happy to answer any questions. Please call me at 752-4136.

Thank you for your assistance.

Sincerely,

Sue Adams
Graduate Student

Jeff Boyd
Student Activities
Program Advisor

January 31, 1991

Last week you were mailed a questionnaire asking about your interactions with other groups of people. Your name was drawn in a random sample of OSU students.

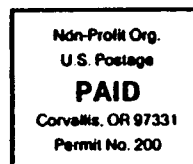
If you have already completed and returned it to us please accept our sincere thanks. If not, please do so today. Because it has been sent to only a small, but representative, sample of students it is extremely important that yours also be included in the study if the results are to accurately represent the opinions of OSU students.

If by chance you did not receive the survey, or it was misplaced, please call me or leave me a message at 752-4136, and I will send you another one right away. I appreciate your help.

Sincerely,

Sue Adams

Sue Adams
OREGON STATE UNIVERSITY
Administrative Services A200
Corvallis, OR 97331-2133



February 11, 1991

Thank you for agreeing to send back this survey about social interaction. Your response is very important, because we only asked a small random sample of students to complete them. We would like to receive them as soon as possible, by the end of this month, so we can begin the data analysis.

I just want to remind you that it has the support of several campus leaders, among them Shahid Yusaf, ASOSU President; Yvette Woods, United Black Student Association President; Gerald Kary, Native American Student Association President; and Jose Perfecto, Hispanic Student Union President, and Jeff Boyd, Program Advisor.

Your response will be completely confidential. Your name will never be placed on the survey, so there will be no way to associate your name with your responses. All personal information will be summarized as group information only. The identification number on the front is for mailing purposes only, so that your name may be checked off the list when your survey is returned.

To return the survey, please place it in the reply envelope and send it through campus mail or through the regular post office. If you live in a residence hall, you may place it in campus mail at your front desk. Your cooperation and participation is greatly appreciated. I will be happy to answer any questions. Please call me at 752-4136.

Thanks again.

Sincerely,

Sue Adams
Graduate Student

February 14, 1991

About three weeks ago we wrote to you seeking information about your interactions with people from various ethnic groups. We are writing to you again because your response is very important. As of today we have not yet received your completed questionnaire. We would like to receive them as soon as possible; the data analysis will begin in early March.

Information from this study will help OSU develop programs to increase student interaction. It has the support of several campus leaders, among them Shahid Yusaf, ASOSU President; Yvette Woods, United Black Student Association President, Gerald Kary, Native American Student Association President; and Jose Perfecto, Hispanic Student Union President.

If you have any questions, please call Sue at 752-4136. Remember, your response will be completely confidential. The survey should take about 10 minutes to fill out. To return the survey, please place it in the reply envelope and send it through campus mail or drop it in a mail box. Your cooperation and participation is greatly appreciated!

Sincerely,

Sue Adams
Graduate Student

Jeff Boyd
Student Activities
Program Advisor

P.S. We realize it is difficult to quantify answers about social interactions, so if you would like to add anything more about your interaction with others, please enclose another page if you would like, and we will report these answers anonymously.

APPENDIX D

TABLES

Table 26: Mean Number of Friends Among Target Groups: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	1.42	130	2.57	1.68	104	3.20	.34	.56
American Indian	.62	141	1.24	.65	112	1.26	.03	.86
Asian American	2.44	121	6.92	2.13	98	5.37	.05	.83
Caucasian American	8.11	106	10.97	7.14	95	11.16	.32	.57
Hispanic American	1.57	122	3.82	1.66	92	2.96	.05	.82

All respondents but target groups were included in analysis.

Table 27: Duration of Contact Toward Target Member: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	2.35	80	.83	2.25	77	.88	.29	.59
American Indian	2.19	64	.81	2.08	49	.86	.21	.65
Asian American	2.49	93	.73	2.32	73	.86	1.43	.23
Caucasian American	2.69	97	.64	2.70	91	.67	.01	.92
Hispanic American	2.18	78	.88	2.31	62	.80	.54	.46

1 = less than six months; 2 = six months to one year; 3 = over a year

Note: 4 = "doesn't apply" responses were excluded.

All respondents but target groups were included in analysis.

Table 28: Frequency of Contact With Target Group Member: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	2.75	102	1.20	2.60	88	1.19	.17	.68
American Indian	2.95	84	1.18	3.03	70	1.18	.13	.72
Asian American	2.19	108	1.06	2.41	82	1.13	2.37	.13
Caucasian American	1.42	102	.89	1.29	94	.62	1.48	.23
Hispanic American	2.72	100	1.16	2.68	78	1.21	.01	.94

1 = once a day; 2 = once a week; 3 = once a month; 4 = rarely

All respondents but target groups were included in analysis.

Table 29: Overall Composite Scores of Mean Comfort Level with Target Groups: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	5.46	126	1.44	5.78	101	1.19	3.40	.07
American Indian	5.63	135	1.42	5.70	109	1.26	.43	.52
Asian American	5.46	117	1.42	5.37	95	1.45	.27	.60
Caucasian American	5.98	103	1.14	6.07	95	1.18	.19	.67
Hispanic American	5.59	120	1.38	5.70	90	1.30	.44	.51

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

Table 30: Peer Composite Scores of Mean Comfort Level with Target Groups: by Gender

Target Group	Respondent Group							
	Outgroup Men	N	SD	Outgroup Women	N	SD	ANOVA F	p
African American	5.32	126	1.51	5.57	101	1.31	1.61	.21
American Indian	5.62	136	1.48	5.70	111	1.36	.34	.56
Asian American	5.53	120	1.44	5.31	96	1.51	1.26	.26
Caucasian American	5.98	103	1.28	6.08	96	1.30	.22	.64
Hispanic American	5.64	121	1.42	5.67	92	1.38	.03	.87

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

Table 31: Mean Comfort Level With Target Member as President: by Gender

Target Group	Respondent Group						ANOVA F	p
	Outgroup Men	N	SD	Outgroup Women	N	SD		
African American	5.01	129	1.90	5.43	104	1.61	3.32	.07
American Indian	5.12	139	1.76	5.14	112	1.75	.08	.78
Asian American	4.84	120	1.97	4.87	98	1.96	.00	.97
Caucasian American	5.79	106	1.45	5.81	96	1.57	.00	.96
Hispanic American	4.80	122	1.85	5.24	92	1.79	3.08	.08

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

All respondents but target groups were included in analysis.

Table 32: Overall Composite Scores of Mean Comfort Level with Caucasian Americans: by Ethnicity and Gender

Target Group	Respondent Group					
	Men	N	SD	Women	N	SD
African American	5.86	26	.94	5.16	22	1.48
American Indian	6.14	14	1.19	6.68	13	.65
Asian American	5.71	32	1.40	6.23	28	1.10
Hispanic American	6.29	31	.93	6.31	32	.82

df = 3; F = 3.16; p < .026

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

Table 33: Peer Composite Scores of Mean Comfort Level with Caucasian Americans: by Ethnicity and Gender

Target Group	Respondent Group					
	Men	N	SD	Women	N	SD
African American	6.04	26	.98	5.25	23	1.73
American Indian	5.93	14	1.53	6.74	13	.51
Asian American	5.60	32	1.56	6.20	28	1.16
Hispanic American	6.34	31	.96	6.30	32	1.00

df = 3; F = 3.73; p < .012

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

Table 34: Mean Comfort Level with American Indian Professors: by Ethnicity and Gender

Target Group	Respondent Group					
	Men	N	SD	Women	N	SD
African American	6.25	24	1.97	5.78	23	1.59
Asian American	5.53	34	1.62	6.18	28	1.19
Caucasian American	6.51	49	1.02	6.43	30	1.14
Hispanic American	5.38	32	2.00	6.24	33	1.03

df = 3; F = 3.00; p < .031

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

Table 35: Mean Comfort Level with Caucasian American Dates: by Ethnicity and Gender

Target Group	Respondent Group					
	Men	N	SD	Women	N	SD
African American	6.19	26	1.50	4.13	23	2.63
American Indian	5.57	14	1.99	6.69	13	.63
Asian American	5.75	32	1.63	6.29	28	1.15
Hispanic American	6.30	33	1.33	6.21	33	1.24

df = 3; F = 8.24; p < .001

1 = very uncomfortable; 4 = neutral; 7 = very comfortable

Table 36: Correlations Between Scores on Mean Contact and Overall Composite Mean Comfort Scales

Target Group	Respondent Group									
	African American	N	American Indian	N	Asian American	N	Caucasian American	N	Hispanic American	N
African American	---	---	.17	26	.54**	52	.37**	72	.31**	61
American Indian	.44**	35	---	---	.24	40	.02	55	.26*	49
Asian American	.27*	42	.19	26	---	---	.47	73	.29*	60
Caucasian American	.41**	48	.62**	27	.64**	58	---	---	.33**	62
Hispanic American	.26*	44	.23	26	.49**	54	.42	68	---	---

* indicates correlation is significant at the $p < .05$ level.

** indicates correlation is significant at the $p < .01$ level.

Table 37: Correlations Between Scores on Mean Contact and Non-Peer Composite Mean Comfort Scales

Target Group	Respondent Group									
	African American	N	American Indian	N	Asian American	N	Caucasian American	N	Hispanic American	N
African American	---	---	.10	26	.47**	52	.34**	72	.20	61
American Indian	.43**	35	---	---	.12	40	-.01	55	.19	49
Asian American	.14	42	.22	26	---	---	.46	73	.22*	60
Caucasian American	.37**	48	.55**	27	.55**	58	---	---	.28*	62
Hispanic American	.28*	44	.25	26	.40**	54	.45	68	---	---

* indicates correlation is significant at the $p < .05$ level.

** indicates correlation is significant at the $p < .01$ level.

Table 38: Correlations Between Scores on Mean Contact and Peer Composite Mean Comfort Scales

Target Group	Respondent Group									
	African American	N	American Indian	N	Asian American	N	Caucasian American	N	Hispanic American	N
African American	---	---	.23	26	.56**	52	.38**	72	.39**	61
American Indian	.38*	35	---	---	.32*	40	.05	55	.32*	49
Asian American	.37**	42	.14	26	---	---	.43**	73	.35*	60
Caucasian American	.38**	48	.61**	27	.68**	58	---	---	.34**	62
Hispanic American	.19	44	.20	26	.53**	54	.35**	68	---	---

* indicates correlation is significant at the $p < .05$ level.

** indicates correlation is significant at the $p < .01$ level.