#### DOCUMENT RESUME

ED 394 093 CG 026 914

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TITLE Racial Attitude Development and Inter-Ethnic

Experiences of White University Students.

PUB DATE 11 Aug 9

NOTE 19p.; Paper presented at the Annual Convention of the

American Psychological Association (103rd, New York,

NY, August 11-15, 1995).

PUB TYPE Speeches/Conference Papers (150) -- Information

Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Attitude Measures; \*College Students; Cultural

Interrelationships; Cultural Pluralism; Ethnic Groups; Ethnic Relations; Higher Education; \*Intercultural Communication; \*Racial Attitudes;

Social Attitudes; \*White Students

#### **ABSTRACT**

Relations between ethnic groups on the nation's college campuses are being viewed with increasing interest. Research suggests that the presence of certain types of interracial or inter-ethnic experiences appear to positively influence White college students' racial attitudes. The purpose of this document is to address how the racial attitudes of White university students may develop throughout college in relation to academic class level and to specific inter-ethnic experiences. White college students (n=270) completed a packet including the White Racial Identity Attitude Scale, the Purdue Master Attitude Scale, and the Inter-ethnic Experiences Questionnaire (created for this study). Results indicated students do not differ by academic level in racial identity and attitudes reported. This finding suggests that White university students do not seem to develop more positive nor more negative racial attitudes as they progress through college. Other results indicated that social experience is related to overall racial identity and to attitudes toward Black and Hispanic persons. Analyses did not support that social experience contributed to attitudes regarding Asian American or American Indian persons. Limitations addressed were the time of year students were surveyed, the non-random, cross sectional nature of the study, and generalizability concerns. Multiple recommendations were addressed. Contains 19 references and 6 tables. (JBJ)



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# RACIAL ATTITUDE DEVELOPMENT AND INTER-ETHNIC EXPERIENCES OF WHITE UNIVERSITY STUDENTS

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In R. J. Steward (Chair), <u>Rethinking the Application of Racial Identity in Developmental Theory, Training, and Counseling Application.</u> Symposium conducted at the 103rd Annual Convention of the American Psychological Association, New York, NY, August 11, 1995.

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### Introduction

Relations between ethnic groups on the nation's college campuses are being viewed with increasing interest (Collison, 1993a; Collison, 1993b; Elfin & Burke, 1993; Sanoff, Minerbrook, Thornton, & Pezzullo, 1993; Shea, 1993; Sue & Sue, 1990). An area of particular exploration concerns the relationship between the type and degree of cross-cultural or inter-ethnic experiences college students gain, and the racial attitudes these interactions may facilitate (Patterson, 1994). Research suggests that the presence of certain types of interracial or inter-ethnic experience appears to positively influence White college students' racial attitudes (Brooks, Sedlacek & Mindus, 1973; Minatoya and Sedlacek, 1981; Molla and Westbrook, 1990; Sedlacek, Brooks and Mindus, 1973). However, Sue and Sue (1990) address the paradox that in spite of their supposed liberal and progressive nature, the country's colleges and universities are experiencing an increase in negative racial incidents. It is important that university personnel continue in their efforts to address and diminish the effects of prejudice and racism on campuses, as well as for researchers and educators to explore the process of attitude development within the students they train. The purpose of this presentation is to address how the racial attitudes of White university students may develop throughout college in relation to academic class level and to specific inter-ethnic experiences.

## Review of Literature

## White Persons' Inter-ethnic Experiences

In a comprehensive review of literature which addressed the effects of interracial contact on attitude change, Amir (1969) presented mixed support for the concept that increased contact and communication among persons ethnically different may lead to improved understanding and reduced prejudice. He presented evidence which shows that certain types of contact tends to facilitate attitude change between persons of different ethnic groups, and found that "...'favorable' conditions tend to reduce prejudice, (and) 'unfavorable' ones may increase prejudice and intergroup tension" (Amir, 1969, p. 338).

Jackman and Crane (1986) found that increased proximity to Black persons improved the probability that White persons would interact with Black persons. Interestingly, the effects of only having a Black acquaintance on White attitudes were nearly equal to the effects of only having a Black friend. These researchers suggested that it is not the degree of intimacy of friendship, as suggested by traditional contact theory, but simply experience with Black persons that affects attitudes (Jackman &



Crane, 1986). However, they offered that White persons must know Black persons who are both good friends as well as acquaintances for there to be any substantial effect on their attitudes toward Black persons.

## Inter athnic Experiences of White University Students

Chickering (1969) wrote that during the college years an individual may experience interpersonal growth in two areas; the increase of tolerance and respect for those different from the individual, and an increased interdependence, trust and stability in interpersonal relationships. Chickering defined tolerance as "... an increasing openness and acceptance of diversity, which ... increases the range of alternatives... for close and lasting friendships" (1969, p. 94). He believed that as the individual develops a broader perspective and understanding of differences between persons, she or he will enjoy an increase in the quality of these interpersonal relationships.

In an early study of White freshmen and the parents of some of these students, Sedlacek, Brooks and Mindus (1973) found that both parents and students held generally negative attitudes toward Black persons. Although students appeared more accepting than their parents of imagined contact situations without regard to the race of the person in the situation, the researchers found that more intimate situations were responded to more negatively by White students and parents. The researchers went on to suggest that for positive interracial relationships to develop, the contact must be socially intimate and sustained. Situations involving regular campus interactions, such as contact in classes or the student union, probably do not meet this criteria of close and lengthy contact and probably will not facilitate positive attitude change. Having a roommate of another race may be the single best means of improving racial attitudes (Brooks, Sedlacek & Mindus, 1973; Sedlacek et al., 1973).

In a study of entering university freshmen, Minatoya and Sedlacek (1981) found that White students rarely had meaningful or lengthy contact with persons of other ethnic backgrounds, and that these students did not express a desire or a reason to change this. The study found that White students favored racial integration but not programs that would facilitate this. Carter, White and Sedlacek (1987) found that entering White first year students felt sad and nervous when considering a Black roommate scenario. In addition, White students expressed disgust and anger when imagining a best friend becoming engaged to a Black person.

In assessing White students' attitudes at a large southern university, Muir (1989) found that over 90% of White students "accept" Black students in academic situations.



Nearly as many Whites (more than 80%) accepted Black students as eating companions. However, less than 40% sampled were willing to engage in the more intimate contact of rooming with or double dating with Black students. Less than 15% of White males and 10% of White females stated that they would date a Black person (Muir, 1989).

Claney and Parker (1989) found a curvilinear relationship between the stages of racial consciousness and perceived comfort with Black persons among White university students. Whites who had little contact or who had much contact with Blacks were more comfortable with Black persons than those who had a moderate amount of contact.

In a study which assessed attitudes of White students toward African American students, Molla and Westbrook (1990) found that the attitudes of White students improved when they had shared a housing unit with a student whose race was different from their own and when the White students reported that this experience was positive. Molla and Westbrook (1990) also reported that White students who had taken courses taught by African American instructors showed less negative attitudes toward African American students. The researchers report a high correlation between Whites' racial attitudes and degree of contact with Black professors.

In conclusion, this brief review suggests certain types of inter-ethnic experiences appear to have an effect on the attitudes of White students. This research, however, is limited in that studies exploring White racial attitudes do so with respect to only Black persons, failing to address students' attitudes towards persons of other ethnic or cultural groups. Further, these studies only suggest the utility of a few types of experiences.

## Developmental Characteristics of White Students' Attitudes

Research addressing White students' racial attitude development across academic classes or age reports mixed findings. Molla and Westbrook (1990) reported that there were no differences found in attitudes toward Black persons as related to academic class standing (freshman, sophomore, etc.). Muir (1989) showed stronger acceptance of Black students in each type of interaction studied as the White students progressed by academic class level, with percentages of acceptance increasing with each academic class level increment. Carter (1990) found no significant differences in White racial attitudes as measured by the WRIAS (Helms & Carter, 1990) on academic class standing, age, sex, and self-reported socioeconomic levels.



In sum, there are mixed findings regarding the developmental nature of racial attitudes throughout the college years. The Patterson (1994) study presented here addresses these points by intentionally exploring racial attitudes of equal numbers of students from each of four academic class levels.

## White Student Attitudes Toward Ethnic Others

A major purpose of this study was to assess the attitudes of White university students toward Black, Hispanic, Asian American, American Indian and White persons. To date, most of the research of White racial attitudes has measured Whites' attitudes toward Black persons. White and Sedlacek (1987) found that when responding to scenarios describing social and interpersonal situations, White students held more negative attitudes toward Hispanic persons and Black persons when the race was known. Further, Whites were more negative toward Black persons than toward Hispanic persons, especially when close personal contact was involved. White and Sedlacek (1987) suggest that more research is needed assessing White students' attitudes toward Hispanic persons.

Patterson (1994) attempts to contribute to understanding the dynamics of White student racial attitudes by assessing attitudes towards more than Black persons only, by assessing attitudes of students representing each academic class level, and by measuring a large variety of the inter-ethnic experiences White students may have acquired.

## Methodology

Patterson (1994) analyzed data collected from two hundred and seventy White university students at a major Eastern university, with two purposes: 1) to explore if students differ in the racial attitudes they display based on their academic class level (freshman, sophomore, etc.), and 2) to explore the relationship between racial attitudes and inter-ethnic experiences. Data were collected from at least fifty qualifying students from each undergraduate academic class level during a one-month period in the Spring semester of 1994. Students were asked to complete a packet including the White Racial Identity Attitude Scale (Helms & Carter, 1990), the Purdue Master Attitude Scale (Remmers, 1960), and the Inter-ethnic Experiences Questionnaire created for this study (Patterson, 1994). Only the data from White students meeting specific characteristics were included in the statistical analyses (i.e., being under 25 years of age, having never resided or traveled outside the continental United States for longer than six months).



The purpose of these exclusionary qualifications was to limit the sample to those White students who were of a traditional college age and to those who had not acquired interethnic experiences via international travel. Of 700 research packets distributed and 405 returned, 270 were complete, met the aforementioned criteria and were included in the analyses.

### **Instruments**

## Inter-ethnic Experiences Questionnaire (IEQ)

The various types of inter-ethnic experience suggested by previous research as influential in the development of racial attitudes were selected for inclusion in the questionnaire created for this study. Questions were generated to assess experiences not only with Black persons, but with persons who are Black, Hispanic, Asian American, American Indian, and Other. The resulting questionnaire was titled the Inter-ethnic Experiences Questionnaire (IEQ) (Patterson, 1994). It therefore measures various inter-ethnic experiences a student may have gained before and during college, i.e. having good friends, acquaintances, roommates and suitemates, experiences gained in schools and in social activities.

The IEQ was scaled based on whether the experiences were Social, Residential or Educational in nature. Social experiences were those involving friends, acquaintances and in socializing. Residential experiences included roommate and suitemate experiences, for example. Educational referred to composition of schools attended and ethnicity of teachers and professors.

## White Racial Identity Attitude Scale

The White Racial Identity Attitude Scale (WRIAS) was developed by Helms and Carter (1990) in order to "...assess attitudes related to the original five stages of White racial identity development proposed by Helms..." (pp. 67-68). It is assumed that an individual's racial identity develops via one's attitudes about being White and White culture as well as about Blacks and Black culture (Helms & Carter, 1990). The scale consists of five subscales of ten items each, designed to assess attitudes related to each of the five stages of identity development (Helms, 1990). The scored responses for items representing each subscale are summed, producing a five-score profile. Subscales with highest scores identify the stages that are descriptive of the respondent.



## Purdue Master Attitude Scale

A Scale For Measuring Attitude Toward Any Defined Group of The Purdue Master Attitude Scales was utilized in this study (Remmers, 1960). It is a seventeen item Thurstone-scored scale of attitude statements. The respondent is instructed to endorse a statement if he or she agrees that the statement is true for each group identified. The groups were identified as Whites, Blacks, Hispanics, Asian Americans, and American Indians. The term American Indian was used to prevent confusion on the part of White respondents, and is often less preferable to Native American.

## Data Analyses

#### Instruments

Results from the WRIAS (Helms & Carter, 1990) indicate students scored highest on the Autonomy (x = 3.825), Pseudo-Independent (3.541) and Contact (3.166) subscales. Scoring higher in the final two subscales of the model indicates students endorsed participation in efforts to challenge one's beliefs, to develop a non-racist White identity, and to gain knowledge and experiences to facilitate in this effort. Results from the Purdue scale (Remmers, 1960) conducted via univariate F tests indicate students reported more favorable attitudes toward White and Asian American persons than toward Black and Hispanic persons.

#### Research Ouestion 1

1) ANOVA indicated that students do not differ by academic level in racial identity (via the Helms scale) and racial attitudes (via the Purdue scale) displayed.

The first research question explored if the racial identity and attitudes of White university students differ depending on the academic class level of the students. The results of the univariate analysis of variance (ANOVA) indicate that students from different academic levels do not differ in the racial attitudes they display. Ten different dependent variables were utilized in measuring attitudes, five representing the stages of the Helms' (1990) model of racial attitude identity development (Contact, Disintegration, Reintegration, Pseudo-Independent, and Autonomy), and five representing the ethnic groups presented in the Purdue scale (attitudes toward White, Black, Hispanic, Asian American and American Indian persons) (Remmers, 1960). None of the ten F values approach significance. Subscale variables of Helms' model do not



differ by academic level, as neither do the attitudes assessed towards persons of the five ethnic groups.

## Research Question 2

2) Multiple Regressions indicated that inter-ethnic experience of the Social type (with friends, acquaintances, and in social activities) was found to predict racial attitudes, and experience gained in residential settings or in educational settings did not.

Ouestion 2 explored whether the types of inter-ethnic experience can predict attitudes. The Inter-ethnic Experiences Questionnaire (Patterson, 1994) was scaled along the dimensions of whether the experience was Social, Educational, or Residential in nature. Ten multiple regressions were carried out using these three dimensions of experiences as independent variables and each of the Helms subscales (five) and the Purdue subscales (five) as the dependent variables. Type of experience was significantly related to the Helms attitude measures of Disintegration ( $R^2 = .145$ ; F(3,254) = 14.348, p < .001), Reintegration  $(R^2 = .076; F(3,262) = 7.205, p < .001)$ , Pseudo-Independent ( $R^2 = .075$ ; F(3,261) = 7.006, p < .001), and to the attitudes displayed toward Black  $(R^2 = .032; F(3,251) = 2.736, p < .05)$  and Hispanic persons  $(R^2 = .043; F(3,249) = .043; F(3,249))$ 3.698, p < .05) via the Purdue scale. Beta weights of the Social type of experience indicate this type of experience was a significant predictor, and the directions of prediction for the Helms subscales were positive for the Pseudo-Independent measure (beta = .279; T = 4.422, p < .001) and negative for Disintegration (beta = -.378; T = -6.19, p< .001) and Reintegration (beta = -.289; T = -4.583, p < .001). This corresponds to the construct of each of these subscales, i.e. social experience predicts lower scores on the two subscales measuring less favorable racial identity attitudes, Disintegration and Reintegration. Similarly, social experience predicts more positive attitudes toward Black (beta = .183; T = 2.752, p < .01) and Hispanic persons (beta = .203; T = 3.069, p < .01).

## **Implications**

Research Question 1 indicated students do not differ by academic level in racial identity and attitudes reported. This finding suggests that White university students do not seem to develop more positive nor more negative racial attitudes as they progress through college. However, since this was a cross-sectional study and students were not followed over the course of their college years, this interpretation must be received



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cautiously. In addition, the first-year students were sampled in the month of April of their first year of study, and thus any effect in attitudes occurring between the day students first arrive on campus and the month of April was not measured. It may be that a critical period exists, one in which White students' racial attitudes are influenced sometime between the months of August and April. Attitudes formed, altered or developed during this period may remain intact and unchanged throughout the duration of one's college experience, and thus differences in attitudes would not be measurable once this critical period of attitude formation has passed. On the other hand, students may arrive at college with the same racial attitudes that they will carry throughout their four-year college careers. Students' racial attitudes therefore would not develop as they progressed through college, and the experiences they gain may not affect their racial attitudes in the ways measured in this study.

Research Question 2 indicated that Social experience is related to overall racial identity and to attitudes toward Black and Hispanic persons. The types of experiences which were subsumed in the Social category of inter-ethnic experience were experiences of having good friends and acquaintances ethnically different from the participants, and the social activities of eating, partying, dating, double dating and "other" social experiences. Analyses did not support that this experience contributed to attitudes regarding Asian American or American Indian persons.

As researchers continue to explore how to facilitate the development of undergraduate students and train graduate students to provide counseling across cultures, it is important to employ interventions which assist in this effort, as well as to support the utility of these efforts. If indeed students do not change in their racial attitudes as they progress through college, goals and assumptions need to be revised or re-addressed. If particular types of experiences promote development and others do not, as shown by careful, sound and replicated research, these experiences should be promoted and other programs redesigned. Researchers need to be able to justify their training and educational efforts, with research which supports the utility and benefit of programming, diversity training, and counseling skills training. It may be discovered that many students are indeed capable of developing in racial identity and more positive racial attitudes, and that perhaps many are not.

### Limitations

This study sampled students during the month of April, failing to measure attitude changes within first-year students between the time they arrived on campus



and the end of their first year. Students in the first year of study should be examined more carefully. The first year may be a time of intense attitude development and reformation, a possibility this study was not able to address. Also, this was a non-random, cross-sectional study, preventing addressing attitude change and the more direct effects of experiences on racial attitudes and racial identity.

A further limitation of this study relates to the generalizing of findings to other universities, as the university of study may be described as rather unique in the high academic achievement and extracurricular involvement of students, presence of campus traditions and overall student demographic composition. Another limitation of the study corresponds with the limitations of the instruments utilized. It would be greatly beneficial to employ other instruments which may more validly measure racial attitudes, and to utilize a blend of quantitative and qualitative research methods in future exploration of these issues.

### Recommendations

The finding that social and personal experience predicts racial identity supports endeavors which encourage students to interact with fellow students. Continuing to design programs which would foster interaction between persons ethnically and culturally different would be beneficial to attitude development. Efforts to improve race relations certainly should build on the interests of students, while considering the unique environments and racial climates that distinguish each college or university. Further, lower numbers of Hispanic and American Indian students greatly diminishes opportunities for students to interact and subsequently increase knowledge and personal relationships with persons of these two groups. Increasing opportunities for these students to enroll and complete college, as well as in offering programming efforts accessing this area of the local community and its leaders may be possible ways to facilitate cultural interaction.

Student affairs and student personnel administrators may utilize these data and knowledge of existing competencies and interests of college students to continue fostering interaction and communication between students. Realizing the inherent difficulty in assisting student development in areas not immediately obvious or of interest to many students, administrators and staff may also benefit from assessing overall long-range plans with the particular purpose of fostering inter-cultural interaction, and may also benefit from examining daily operations and guidelines in particular student contact areas. The attitudes and examples set by administrators and



staff are easily visible to the students colleges and universities serve. With reducing funds and difficulties in programming for seemingly disinterested students, examining our own actions may prove to be the single most effective, as well as cost-efficient, change that university personnel could institute in the ever-important hope of assisting today's young adults in working and living together in harmony in the future.

In sum, university administrators should take advantage of the openness of today's students. Utilizing students' existing interests and competencies, administrators and personnel may facilitate interaction and communication between cultural and ethnic groups through a variety of programming, outreach activities, consultation, mission statements, and daily operations. Involving interested students in this process certainly would prove beneficial. Learning from students about what they have benefited from and enjoyed the most, as well as what the students would like to occur and how to implement this would also be very helpful. These many ideas certainly are not new, though they are supported by this research.

## Summary of Recommendations

- Address dynamics of racial identity and attitudes of White students, exploring how they may be altered via experiences, during which time periods, and to what degree.
- Clarify differences in attitudes toward particular ethnic or cultural groups and the dynamics of these differences.
- Identify goals in training and in developing students and support capability of methods and programs to assist in this effort.
- Employ, strengthen and support social types of interaction between students culturally different, and increase diversity of overall student populations.
- Utilize the interests, energy and competencies of all students to assist in these efforts.
- Examine our own attitudes, interactions, procedures, goals and missions to employ and make visible those behaviors and attitudes we wish students to develop.
- Include students in evaluating and improving existing and newly appplied efforts.



#### References

Brooks, G. C., Jr., Sedlacek, W. E., & Mindus, L. A. (1973). Interracial contact and attitudes among university students. <u>Journal of Non-White Concerns</u>, <u>1</u>, 102-111.

Carter, R. T. (1990). The relationship between racism and racial identity among White Americans: An exploratory investigation. <u>Journal of Counseling and Development</u>, 69(1), 46-50.

Carter, R. T., White, T. J., & Sedlacek, W. E. (1987). White student attitudes toward Blacks: Implications for Black student recruitment and retention. <u>Journal of Social and Behavioral Sciences</u>, <u>33</u>(3), 165-175.

Claney, D., & Parker, W. M. (1989). Assessing White racial consciousness and perceived comfort with Black individuals: A preliminary study. <u>Journal of Counseling and Development</u>, 67, 449-451.

Chickering, A. (1969). Education and identity. San Francisco: Jossey-Bass.

Collison, M. N-K. (1993, April 14). Black students complain of abuse by campus police. The Chronicle of Higher Education, pp. A35-A36.

Collison, M. N-K. (1993, April 28). In Chapel Hill, geography is an issue as students demand a central location for Black cultural center. <u>The Chronicle of Higher Education</u>, pp. A32-A34.

Elfin, M., & Burke, S. (1993, April 19). Race on campus: Segregation is growing, and black-white tensions are high. <u>U. S. News & World Report</u>, pp. 52-56.

Helms, J. E. (1990). Toward a model of White racial identity development. In J. E. Helms (Ed.), <u>Black and White racial identity: Theory, research, and practice</u> (pp. 49-66). Westport, CT: Greenwood.

Helms, J. E., & Carter, R. A. (1990). White racial identity attitude scale (Form WRIAS). In J. E. Helms (Ed.), <u>Black and White racial identity: Theory, research, and practice</u> (p. 249). Westport, CT: Greenwood.

Minatoya, L. Y., & Sedlacek, W. E. (1981). Background and attitude toward interracial contact: A profile of Black and White university students. <u>Integrated Education</u>, 18(5-6), 43-45.

Molla, B., & Westbrook, F. D. (1990). White student attitudes about African American students in a university setting. (Research Report No. 9-90). College Park, MD: University of Maryland Counseling Center.

Muir, D. E. (1989). "White" attitudes toward "Blacks" at a deep-south university campus, 1963-1988. Sociology and Social Research, 73(2), 84-89.



Patterson, B. T. (1994). Racial attitudes and inter-ethnic experiences of White university students: An exploration of the characteristics of racial attitude development. Unpublished doctoral dissertation, University of Kansas, Lawrence.

Remmers, H. H. (1960). <u>Purdue Master Attitude Scale</u>. Purdue Research Foundation: West Lafayette, IN.

Sanoff, A. P., Minerbrook, S., Thornton, J., & Pezzullo, E. (1993, April 19). Students talk about race: At Chapel Hill, N. C., racial tension runs high. A special report. <u>U. S. News & World Report</u>, pp. 57-64.

Sedlacek, W. E., & Brooks, G. C., Jr., & Mindus, L. A. (1973). Racial attitudes of White university students and their parents. <u>Journal of College Student Personnel</u>, <u>14</u>, 517-520.

Shea, C. (1993, April 28). At Penn, Blacks vent anger at student newspaper, triggering debate over free expression. <u>The Chronicle of Higher Education</u>, pp. A32-A34.

Sue, D. W., & Sue, D. (1990). <u>Counseling the culturally different: Theory and practice</u> (2nd ed.). New York: John Wiley & Sons.



Table 1

White Racial Identity Attitude Scale

	Mean	Standard Deviation
Contact	3.166	.408
Disintegration	2.373	.588
Reintegration	2.271	.588
Pseudo-Independent	3.541	.457
Autonomy	3.825	.437

Table 2

<u>Purdue Master Attitude Scale</u>

Attitudes toward:	Mean	Standard Deviation
White persons	7.852	.950
Black persons	7.412	1.247
Hispanic persons	7.273	1.544
Asian American persons	7.854	1.129
American Indian persons	7.553	1.268

Table 3

WRIAS Racial Identity Attitudes by Academic Class Level (Year)

Summary of One-Way ANOVA

Attitude Measures	Groups	Degrees Freedom	Sum of Squares	Mean Square	F
Contact	between	3	.752 38.015	.251 .168	1.491
	within total	226 229	38.768	.100	
Disintegration	between within total	3 246 249	.410 84.076 84.487	.137 .342	.400
Reintegration	between within total	3 254 257	.229 87.114 87.343	.076 .343	.222
Pseudo- Independent	between within total	3 253 256	.388 52.217 52.605	.129 .206	.626
Autonomy	between within total	3 250 253	.197 48.172 48.369	.066 .193	.341

Table 4

Purdue Racial Attitudes by Academic Class Level (Year)

Summary of One-Way ANOVA

Attitude Measures	Groups	Degrees Freedom	Sum of Squares	Mean Square	F
					_
White	between	3	.696	.232	.254
persons	within	243	221.806	.913	
	total	246	222.503		
Black persons	between	3	1.144	.381	.246
r	within	243	376.444	1.549	
	total	<b>24</b> 6	377.587		
Hispanic	between	3	3.849	1.283	.531
persons	within	241	582.407	2.417	
r	total	244	586.256		
Asian	between	3	.898	.299	.228
American	within	242	317.613	1.313	
persons	total	245	318.513		
American	between	3	1.404	.468	.286
Indian	within	242	396.228	1.637	
persons	total	245	397.632		

Table 5

<u>Correlation of Type of Contact Dimension Variables</u>

Variable	Social	Educational	Residential	
Social	1.000			
Educational	.2145**	1.000		
Residential	.3007**	.1529**	1.000	

<sup>\*\*</sup> p < .01 (2-tailed)

Table 6 WRIAS and Purdue Attitude Measures by Type of Inter-ethnic Experience (Social, Residential, Educational)

Summary of Multiple Regressions

Attitude Measure	R Square		DF	Sum of Squares	Mean Square	F
Contact	.018	Regression	3	.725	.242	1.458
Contact	.020	Residual	234	38.762	.166	
Disinformation	.145	Regression	3	12.817	4.272	14.348**
Disintegration	.143	Residual	254	75.634	.298	
Reintegration	.076	Regression	3	7.012	2.337	7.205**
Kennegration	.0.0	Residual	262	84.999	.324	
Pseudo-Indep.	.075	Regression	3	4.132	1.377	7.006**
r seudo-macp.	.070	Residual	261	51.306	.197	•
Autonomy	.030	Regression	3	1.485	.495	2.635
	.000	Residual	258	48.454	.188	
White persons	.005	Regression	3	1.177	.392	.431
Withte persons		Residual	251	228.377	.910	
Black persons	.032	Regression	3	12.537	4.179	2.736*
Drack persons		Residual	251	383.319	1.527	
Hispanic	.043	Regression	3	25.647	8.549	3.690*
persons	10.10	Residual	249	576.886	2.317	
Asian	.014	Regression	3	4.379	1.46	1.142
American persons		Residual	<b>2</b> 49	318.161	1.278	
American	.017	Regression	3	6.997	2.332	1.458
Indian persons		Residual	250	400.026	1.600	

<sup>\*</sup> p < .05
\*\* p < .001