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COMPARISON OF PERSONALITY CHARACTERISTICS OF JUNIOR HIGH STUDENTS FROM AMERICAN INDIAN, MEXICAN AND CAUCASIAN ETHNIC BACKGROUNDS.

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PROJECT "CATCH-UP" WAS DESIGNED TO GIVE CULTURALLY DISADVANTAGED 13 AND 14 YEAR OLDS A SUMMER PROGRAM OF ACADEMIC REMEDIATION, ACCELERATION, AND GENERAL CULTURAL ENRICHMENT. 49 YOUNGSTERS FROM THE PROJECT WERE USED IN THIS STUDY TO MEASURE PROJECT PARTICIPANTS' ATTITUDES TOWARD THEMSELVES AND TO EVALUATE DIFFERENTIAL RESPONSES TO THE PROJECT AND SUBSEQUENT REACTIONS TO SCHOOL EXPERIENCE. THE CALIFORNIA PSYCHOLOGICAL INVENTORY WAS ADMINISTERED TO THE PARTICIPANT GROUP, WHICH CONSISTED OF 26 AMERICAN-INDIANS (13 BOYS AND 13 GIRLS), 13 CAUCASIANS (6 BOYS AND 7 GIRLS), AND 10 MEXICAN-AMERICANS (5 BOYS AND 5 GIRLS). THE TEST RESULTS SHOWED THAT FEMALES RESPONDED IN A CONSISTENT NEGATIVE PATTERN ACROSS THE 18 SUB-TESTS WITH MEXICANS LOWEST AND CAUCASIANS HIGHEST. ETHNIC GROUP DIFFERENCES FOR MALES INDICATED THAT THE MEXICAN AND INDIAN HAD LOWER SOCIAL PRESENCE THAN THE CAUCASIAN. FLEXIBILITY SCORES FOR THE MEXICAN MALE WERE LOWER THAN FOR THE CAUCASIAN OR INDIAN, BUT HIGHER ON SOCIAL RESPONSIBILITY, TOLERANCE, AND INTELLECTUAL HONESTY. (ES)

COMPARISON OF PERSONALITY CHARACTERISTICS OF JUNIOR HIGH STUDENTS  
FROM AMERICAN INDIAN, MEXICAN AND CAUCASIAN ETHNIC BACKGROUNDS

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A. PROBLEM

In the northwest corner of Washington State, which houses the reservations of the Lummi, Nooksack, Swinomish, and Skagit American-Indian tribes, it is well established that few adolescents from these ethnic backgrounds complete high school. Further, with the growing migratory farm population this plight is reoccurring among the Mexican-Americans. National recognition of the relationship between socio-economic disadvantage and academic failure has stimulated federal programs for those beginning (Head Start) or completing (Upward Bound) formal schooling but little has been done for those in the middle school years. Project Catch-Up is just such a program.<sup>2</sup> The program provides area representative culturally disadvantaged 13 and 14 year olds with a six-week summer residence program of academic remediation and acceleration and general cultural enrichment.

While primarily a demonstration project, the ultimate success of which must await future evaluation, some measures were obtained of present personality characteristics. Because the relationship of race, ethnicity, and achievement motivation is well documented (9, 10) and evidence is available that the "folk concepts" measured by the California Psychological Inventory (CPI) (3) are significantly related to academic success (2, 4, 6, 7), the

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CPI was used to measure project participants' attitudes toward themselves and to evaluate differential responses to the project and subsequent reactions to school experiences. The present study presents a comparative analysis of responses to this one instrument; essentially it is both a construct validation study of the experimental instrument for use with this age group and a descriptive analysis of ethnic differences.

#### B. METHOD

From over 200 referrals from the junior high schools in northwest Washington, one hundred 13 and 14 year-old students were selected who best met the criteria of teacher judgment of good academic potential, achievement below expected ability, evidence of socio-cultural deprivation, and no evidence of serious emotional problem. From the 100 students selected 50 were randomly assigned to the participant group and 50 to a control group. Of the 50 assigned to the participant group, 49 completed the program. The students completing the CPI, then, included 26 American-Indians (13 boys and 13 girls), 10 Mexican-Americans (5 boys and 5 girls), and 13 Caucasians<sup>3</sup> (6 boys and 7 girls).

The 18 measures of the CPI represent "folk concepts" which are dimensions of personality arising out of social living which have cross-cultural validity (5). Though the normative sample for this instrument includes junior high students (3) the limited verbal facility of the present population necessitated modification of the usual administration. With the author's permission the test was administered in six separate sessions, allowing time for completion and opportunity for assistance with unfamiliar vocabulary.

### C. RESULTS

Statistical analysis of the total responses to the CPI BY three-factor mixed analysis of variance with one repeated measure (8, p. 281 ff) showed no significant overall sex effect, no overall ethnic effect and no overall sex by ethnic group interaction. However, significant differences were found across the 18 sub-tests ( $p < .001$ ), across the tests by sex ( $p < .002$ ), across tests by ethnic group ( $p < .005$ ) and across tests by sex and ethnic group ( $p < .001$ ).

The significant triple interaction of sex by ethnic group by tests indicated that further analyses would provide useful information. Three two-variable analyses were run, one for each ethnic group, in order to determine the sources of the sex by test interaction. Then two more two-variable analyses were run, one for each sex, to determine the sources of the ethnic groups by tests interaction (8, p. 267 ff). The most obvious finding was that the mean scores on the 18 tests differed in all five analyses ( $p < .001$ ). The second major result was an interaction between ethnic groups and tests for the males ( $p < .01$ ). This significantly different male ethnic group response to the sub-tests of the scale is illustrated in Figure I. The Caucasian males mean scores were higher on the sub-tests of social presence and flexibility; while the mean scores for the Mexican males were higher on the sub-tests of responsibility, socialization, self-control, tolerance, good impression, communality, achievement via conformity and intellectual efficiency. Noticeable were the lower mean scores for the Indian males on the sub-tests of sense of well-being and intellectual efficiency.

The third result from these two-variable analyses was that the mean ethnic group scores over all 18 tests were different for females ( $p < .025$ ).

Attention to Figure II indicates that the consistent pattern of response across the tests was for the Mexican female to score the lowest, the Indian female slightly higher while the Caucasian female had the highest scores (mean scores for the 18 sub-tests were Mexican, 32.38, Indian, 34.16, and Caucasian, 40.07). Noticeable were the low mean scores for all three groups on the sub-tests of capacity for status, feeling of well-being, tolerance and intellectual efficiency.

To find specifically the source of the interaction between the sexes and ethnic groups for the various tests, 18 two-variable factorial analyses of variance were run. Ten significant differences were found, indicating that eight of the sub-tests differentiated significantly. These sub-tests were social presence, sense of well-being, socialization, tolerance, intellectual efficiency, psychological mindedness, flexibility, and femininity. Only two of the differences showed significant sex by ethnic group interaction: tolerance ( $p < .025$ ) and intellectual efficiency ( $p < .05$ ). Figures III and IV illustrate this interaction. The four significantly different ethnic responses were to social presence ( $p < .025$ ), psychological mindedness ( $p < .01$ ), flexibility ( $p < .001$ ) and femininity ( $p < .05$ ). The four significantly different sex responses were to sense of well-being ( $p < .05$ ), socialization ( $p < .025$ ), tolerance ( $p < .025$ ) and femininity ( $p < .025$ ).

Duncan's range test (1) was used for comparisons of individual mean differences. Nine such comparisons were made on the eight sub-tests found to discriminate significantly totalling 72 comparisons. The nine comparisons made were: (1) Indian-Caucasian males, (2) Indian-Mexican males, (3) Caucasian-Mexican males, (4) Indian-Caucasian females, (5) Indian-Mexican females, (6) Caucasian-Mexican females, (7) Indian males-females, (8) Caucasian males-females, (9) Mexican males-females.

Fifteen of these 72 comparisons were significant at the .05 level. Of these, five showed ethnic differences between males, five were ethnic differences between females, and five were sex differences within the three ethnic groups. The four sub-tests of socialization, tolerance, psychological mindedness, and flexibility had three significant differences. The sub-tests of social presence, sense of well-being, and intellectual efficiency had one significant difference. No significant differences were found for femininity.

The three significantly different responses to socialization were by Indian-Mexican males, Caucasian-Mexican males, and Mexican males-females. On this sub-test the female responses were relatively homogeneous (mean standard scores were Indian, 32.92, Caucasian, 39.83, Mexican, 33.80). The differential male responses placed the Mexican males significantly higher than the Caucasian or Indian males (mean standard scores were 43.60, 36.38 and 35.71). Further, the Mexican male was also appreciably higher than his female counterpart (43.60 and 33.80).

The sub-test measuring tolerance differentiated significantly between the Caucasian-Mexican female, Indian male-female, and Mexican male-female. On this scale the males were relatively more homogeneous in their responses while the female responses placed them in a hierarchy with the Caucasian high in tolerance and the Mexican low (31.14, 22.46, and 17.80). The Mexican male, again, is significantly higher than the female (38.00 and 17.80) and the Indian male is higher than the female (31.38 and 22.46).

With regard to psychological mindedness the differences found were Indian-Caucasian females, Indian-Mexican females and Indian male-female. The males were more homogeneous in their responses but the females this time

showed a dichotomous response pattern with Indian females low (34.08) and Caucasian and Mexican females high (47.00 and 41.60). The Indian male was significantly higher than the Indian female (40.15 and 34.08).

The significant differences for flexibility were Caucasian-Mexican males, Indian-Caucasian females, and Caucasian-Mexican females. The females were on a continuum with Caucasians high and Mexicans low (61.14, 50.38, and 43.20). The males, also, followed a similar pattern with Caucasians high and Mexicans low (57.71, 50.23, and 42.80).

The one significant difference in response to social presence was between Indian and Caucasian males, placing them in a rather skewed hierarchy with Caucasians high and Indians and Mexicans low (48.57, 39.46, and 39.00). For sense of well-being the significant difference was between the Mexican males and females (37.80 and 17.20). For intellectual efficiency the significant difference was between Indian-Mexican males placing the males on a continuum with Mexicans high and Indians low (34.60, 24.14, and 19.31).

These last comparisons indicate that of the five ethnic differences, four involved Mexican males and on three the Mexican had the higher score. The Mexican females, on the other hand, were involved in four of the five differences found among females across ethnic groups, and on three the Mexican had the lower score. Three of the sex differences were between Mexican males and females. On all three the Mexican male had the higher score.

#### D. DISCUSSION

Despite difficulties in administering a 480 item test to junior high students with limited verbal ability the differential response of the

Catch-Up youngsters to the CPI attests to the usefulness of the instrument in measuring cultural-ethnic differences. Because of the frustrations exhibited during the administration, however, some question is raised as to whether the test should be recommended for general use with this age group particularly if the group represents a disadvantaged cultural background. Certainly if used, ample opportunity for questioning to clarify meaning is a necessary requirement. For example, one Mexican girl initially responded to the item "I think Lincoln was greater than Washington," by stating that she could not answer because she had never been there!

Nevertheless, the highly significant sex and ethnic group differences measured by the test did provide additional information about problems these young people are facing. Of particular interest was the evidence that females, though evidencing specific ethnic differences ordered with the Mexican lowest and Caucasian highest, showed a consistent pattern of response across the 18 sub-tests; a finding which pointed to a more homogeneous female response which was suggestive of a generalized lower socio-economic attitude. Moreover, the female responses emphasized more negative and poorly motivated attitudes. Project Catch-Up staff members did find the girls more difficult and much more resistant to change. Seemingly because of their earlier maturing, they had accepted their role in life with greater passivity and with little expectation for change. An example of this was one girl's English theme which began in response to the question, "Twenty years from now. . ." with, "I'll probably have 10 children, though I only want 3."

The ethnic group differences for males across the 18 sub-tests showed the Mexican and Indian males to have lower social presence than the Caucasian. Further, flexibility measures for the Mexican male were lower than for either the Caucasian or Indian.

However, the Mexican males showed significantly greater social responsibility, tolerance, and intellectual efficiency. These findings were supported by behavioral observations of the project participants. All the Mexican youngsters came from intact homes. Even though extreme financial deprivation existed in many cases, strong family loyalties were universal within a predominantly patriarchal family organization. Further, in many of the Mexican families the conviction was voiced that the future economic security of the family would depend upon the success of the son, a condition which leads to preferential treatment for boys.

In contrast to the Mexican families the considerable family disorganization found in both the Caucasian and Indian groups seemed related to their lower scores on social maturity and motivation for intellectual achievement. Particularly noticeable were the responses of the American-Indian. Not only was this group exposed to the debilitating effects of family disorganization with only weak ties to fading tribal organization, but these young people had also to learn to handle strong local prejudicial attitudes. It seemed no wonder that by the early teens the American-Indian boy sees himself as relatively less responsible socially and lacking in intellectual motivations.

If these results were used to design the educational program which would be maximally effective in accelerating academic achievement in the culturally disadvantaged teenager, it would strongly support the assumption that the participant group should be predominantly male with a majority of Mexican-Americans. Indeed, by the end of the summer the rather frazzled staff would have welcomed such a participant group! What in actuality the results of the study clearly illustrate is that

cultural disadvantage (for whatever worth exists in the term) has differential effects both in relationship to the sex of the recipient and to his ethnic group. The passive acquiescence of the teenage girl to the all pervasive effects of deprivation is an area of study which warrants further attention. Further, the American-Indian's plight is unique. We have but scratched the surface.

#### E. SUMMARY

The California Psychological Inventory was administered to 49 culturally disadvantaged junior high students participating in a summer educational enrichment program. The participant group included 26 American Indians (13 boys and 13 girls), 13 Caucasians (6 boys and 7 girls) and 10 Mexican-Americans (5 boys and 3 girls). Statistical analyses of the test results showed that females, though evidencing specific ethnic differences ordered with the Mexican lowest and the Caucasian highest, responded in a consistent negative pattern across the 18 sub-tests. Ethnic group differences for males indicated that the Mexican and Indian had lower social presence than the Caucasian. Further, flexibility scores for the Mexican male were lower than for the Caucasian or Indian, but higher on social responsibility, tolerance and intellectual efficiency.

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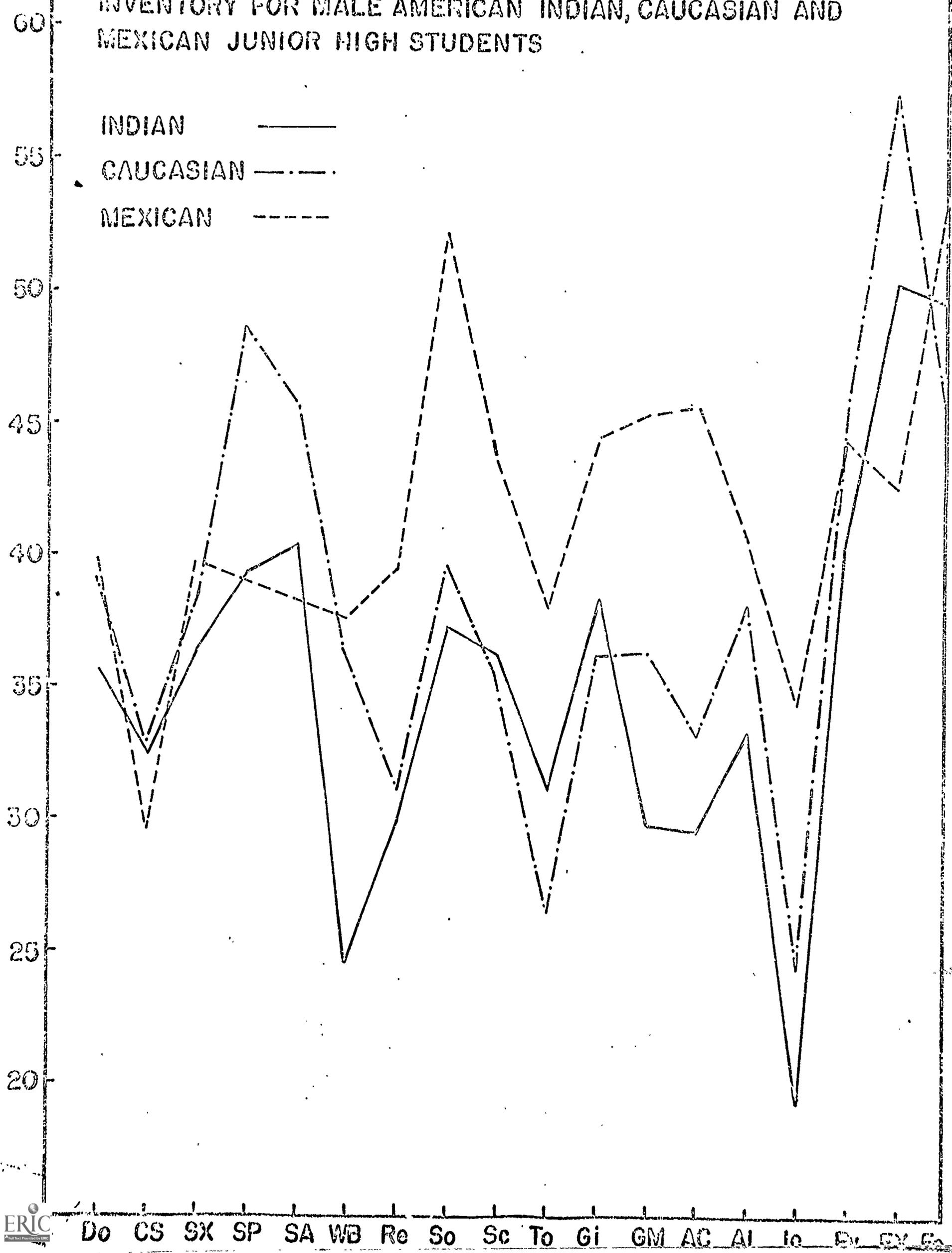
## FOOTNOTES

1. The author is indebted to Dr. B. L. Kintz for the statistical design and to Adelle McGilliard for computational assistance.
2. Project Catch=Up initiated at Western Washington State College in 1966, is supported primarily by a grant from Rockefeller Foundation.
3. Caucasian as it is used in this context refers to those students who could not be identified with either the disadvantaged American-Indian or Mexican-American groups.

FIGURE 1

MEAN STANDARD SCORES ON THE CALIFORNIA PSYCHOLOGICAL INVENTORY FOR MALE AMERICAN INDIAN, CAUCASIAN AND MEXICAN JUNIOR HIGH STUDENTS

INDIAN ———  
 CAUCASIAN — · — · —  
 MEXICAN - - - - -



# MEAN STANDARD SCORES ON THE CALIFORNIA PSYCHOLOGICAL INVENTORY FOR FEMALE AMERICAN INDIAN, CAUCASIAN AND MEXICAN JUNIOR HIGH STUDENTS

60  
55  
50  
45  
40  
35  
30  
25  
20  
15

INDIAN ———  
CAUCASIAN - · - · -  
MEXICAN - - - -

Do CS SX SP SA WB Ro So Se To GI GM AG AI Is Py FX Fo

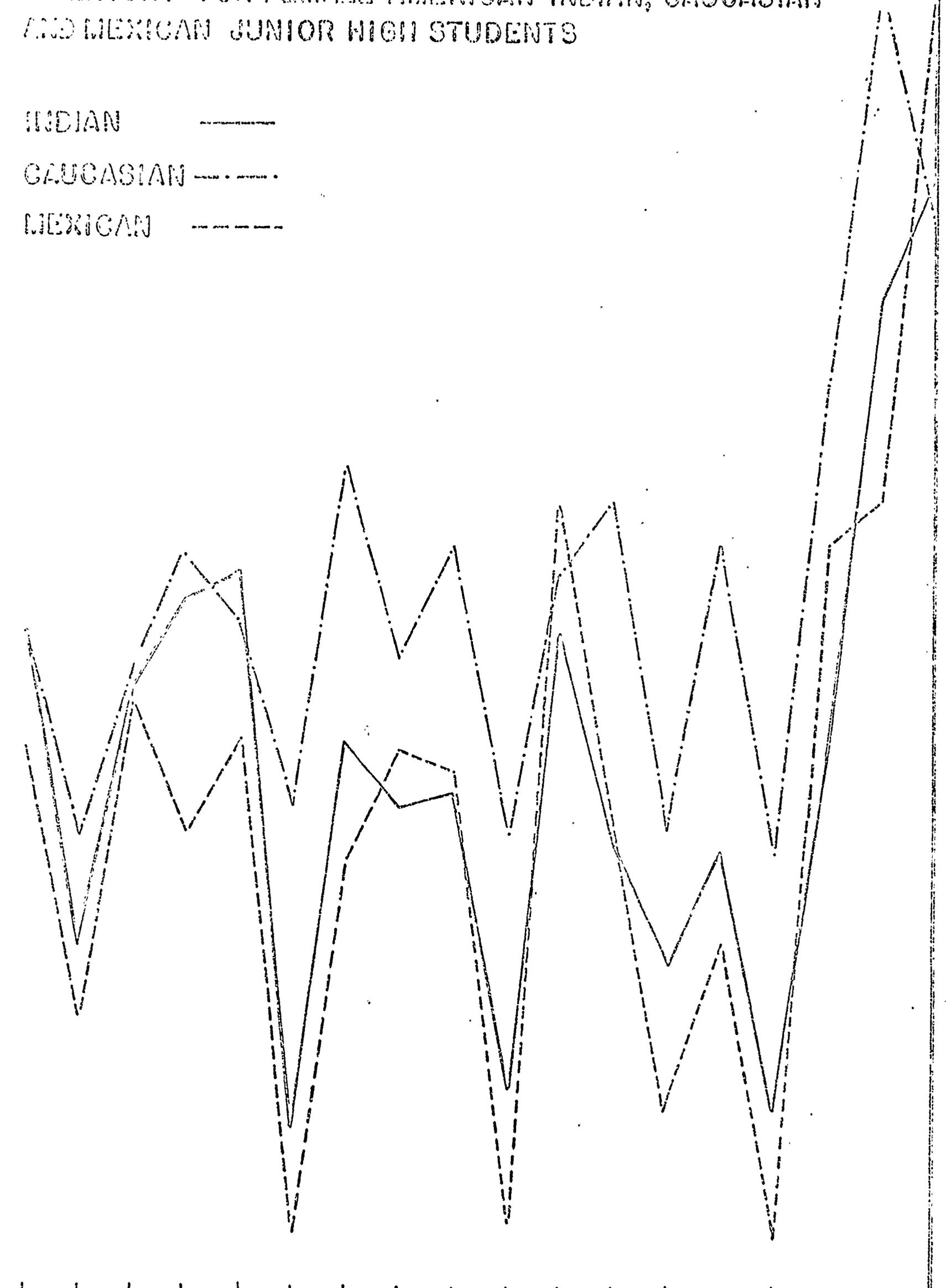


FIGURE III

MEAN SCORES BY SEX AND ETHNIC GROUP FOR AMERICAN INDIAN, CAUCASIAN AND MEXICAN JUNIOR HIGH STUDENTS ON THE CPI SUB-TEST OF TOLERANCE

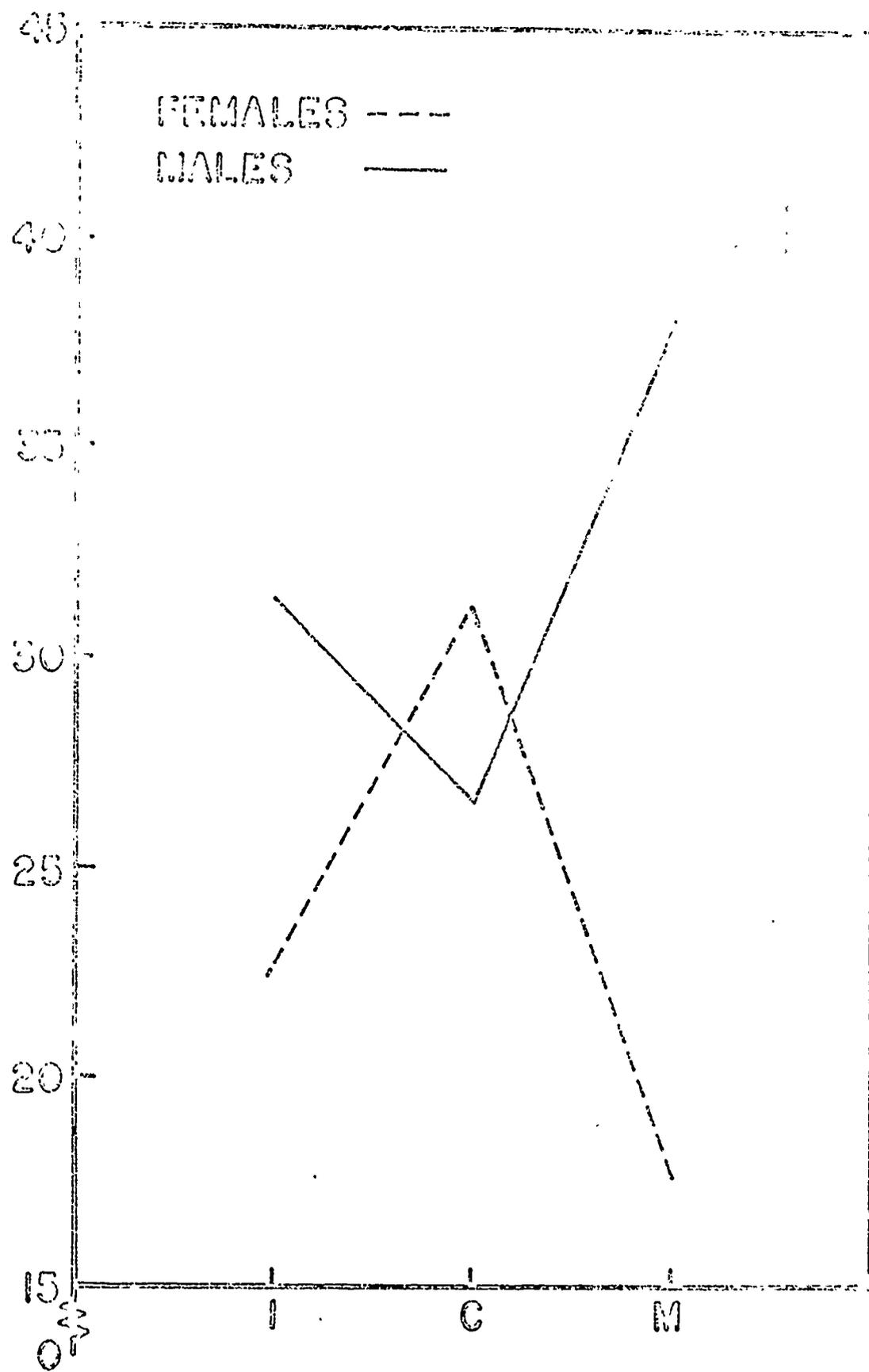


FIGURE IV

MEAN SCORES BY SEX AND ETHNIC GROUP FOR AMERICAN INDIAN, CAUCASIAN AND MEXICAN JUNIOR HIGH STUDENTS ON THE CPI SUB-TEST OF INTELLECTUAL EFFICIENCY

