IQ TESTS AND MINORITY GROUPS

IQ improvement in unemployed adult Chippewa Indians and Caucasians as measured by the Revised Beta Examination

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Intelligence quotient (IQ) has often been viewed to be a fixed construct, particularly in adults Recent research has somewhat "debunked" this idea by showing that IQ gains are possible Previous researchers have focused mainly on younger learners and have used IQ scales that require a degree of reading ability to complete However, little IQ gain research has been done on adults who possess limited reading skills Therefore, the purposes of this study were to (1) determine if adults of limited reading ability could improve their IQ scores on a nonverbal IQ scale after a basic educational experience, and (2) determine if there existed any differences between the IQ gains made by Indians and Caucasians.

METHOD OF INVESTIGATION

All of the subjects that participated in the study were exposed to essentially the same treatment For three months subjects were enrolled in a full-time basic education program which stressed the traditional three "R's." In addition to this training, each subject participated in a weekly group counseling session In these sessions, common problems and fears were discussed while counselors tried to instill feelings of self-worth and confidence in each trainee

The *Revised Beta Examination (RBE)*[1] was selected as it did not require reading ability This test was also judged to be relatively free of cultural biases that might have unfairly lowered the IQ scores of the Indians taking the test

The RBE has an internal consistency or split half coefficient measure of 90 The standard error of measure of this scale has been determined to be 4.5

RESULTS

Hypothesis one, regarding IQ gain, stated that there would be a significant gain in the IQ scores of both the Indian and Caucasian groups This hypothesis, when tested, was supported The Wilcoxon Sign Test was utilized to test this hypothesis This model is designed to test differences between related means from small samples The results of the computations indicated that both groups had made IQ gains significant at the 05 level The data used in this analysis are shown in Table I

Hypothesis two, regarding differences in IQ gain between the two groups, Indian and Caucasian, stated that there would be differences between the gains made in IQ by the two groups. It was thought that the Indian group would, due to cultural deprivation dating back generations, make less significant IQ gains than the Caucasians This hypothesis, however, was not supported by the findings A numerical difference in the mean gain of the two groups was 2 3 points The result of application of the *t*-test was *t* equal to 589 which indicated this difference to be statistically insignificant at the .05 confidence level The data used in this t-test are shown in Table II

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study indicated that the IQ of the under-privileged adult is changeable When appropriate instruc tion and guidance inputs are provided, adults of limited education can improve their IQ

Teachers, industrial trainers and special project directors who have previously used IQ scores largely to judge and stereotype adults of the type tested in this study as "intellectual have nots" might reevaluate such practices Seemingly, intelligence measures reflect previous educational opportunities as well as "native ability "

REFERENCES

1. Kellogg, C.E., and Morton, N W., *Revised Beta Examination*, The Psychological Corp., 1957

TABLE I

Pre and Post Test IQ Scores of Indians and Caucasians

Subject Number	Score Beta One	Score Beta Two	Difference between Beta One and Beta Two	Group Rank by Gain
Group I				
1	117	117	0	1
2	111	113	+2	2
3	107	113	+6	3
4	103	120	+17	8
5	95	108	+8	4
6	86	98	+12	6
7	82	95	+13	7
8	78	97	+9	5
Group II				
9	116	113	3	2 5
10	106	111	+5	4
11	103	111	+8	6
12	102	105	+3	2 5
13	99	103	+4	4
14	88	100	+2	1
15	79	91	+12	7
16	67	85	+18	8

TABLE II

Comparison of IQ Gains of Indians and Caucasians

Subject Number	Adjusted Beta Score	Adjusted Beta Score Squared	Difference in Mean Gain of Groups One and Two	t-score
Group I				
1	3	9	2 3	589 n s 05
2	5	25		
3	9	81		
4	20	400		
5	11	121		
6	15	225		
7	16	256		
8	12	144		
Group II				
9	0	0		
10	8	64		
11	11	121		
12	6	36		
13	7	49		
14	5	25		
15	15	225		
16	21	441		