

Route 10
418 Lafayette Road
Clarksville, Tennessee 37040
September 30, 1978

Ms. Laura Gilpin
409 Camino Del Monte Sol
Santa Fe, New Mexico

Dear Ms. Gilpin:

I enjoyed speaking with your secretary on Thursday. As she has probably told you, I am seeking your permission to use the very excellent map of the Navajo Reservation which appears on page xi of your The Enduring Navaho (Austin, Tex.: Univ. of Texas Press, 1975). The map in your book is one of the best, if not the best, that I have seen. We have enjoyed your book, which was a gift to us when we left Chinle Boarding School for Ft Campbell in 1976.

I would like to use the map in my MEd thesis for Eastern New Mexico University, which is entitled "Navajo Student Educational Attitudes and Locus of Control as Related To Achievement in Three Different Types of School Systems". The first draft of the thesis was sent to my committee last week (with a copy of your map included). I will not, of course, use the map in the final thesis unless I have your permission. The thesis must be finished by December, but I hope to be able to go to Portales in late October to orally defend it.

Attached is a copy of the 'Summary and Conclusions' of the thesis, that you may have an idea of the nature of the research. The schools participating in the research (although nowhere named in the thesis) were St Michaels High School and Window Rock High School.

I hope you will allow me permission to use the excellent map from your book. Thank you for your consideration. A stamped, self-addressed envelope is enclosed for your reply.

Sincerely,

Brian T. Wruck
Brian T. Wruck

Copy of 'Summary and Conclusions' of "Navajo Student Educational Attitudes as Related to Achievement in Three Different Types of School Systems"

Summary

It was noted that over 100 years after the Treaty of 1868, Navajo educational achievement is still seriously behind the rest of the Nation, yet education is one of the Navajos' most vital resources for development and improvement of their living conditions. A need was seen to attempt to find causal factors related to Navajo educational achievement. The relationship of internal/external control, educational attitudes and type of school system attended to educational achievement was selected as a promising area of study in Navajo secondary education. The study assumed certain characteristics were common to the Navajo personality, and assumed the social learning theory of personality.

The review of the literature developed known relationships of Indian educational attitudes and locus of control to their educational achievement. Differences in philosophy of education between the types of school systems serving the Navajo were explored.

Following from the functional, perceptual, and learning theories of attitude formation, the Education Scale of the Minnesota Survey of Opinions was selected to measure student attitudes toward education; internal/external control attitudes were measured through the James IE Scale; and socio-economic data was gathered through a questionnaire derived for this study. Aptitude was measured, rather than achievement (due to the availability of the test at both participating schools), via the Verbal (VE), Quantitative (AQ), and Academic Ability (AA) composite scores of the Armed Services Vocational Aptitude Battery (ASVAB). Ancillary data was gained from a partial sample of teachers on a questionnaire derived for this study, from administrative data gained orally and in writing, and from a few student interviews.

The raw data was gathered from junior and senior students and staff at a public and a parochial high school in the southeastern corner of the Navajo Reservation on April 24-25, 1978. A total of 70 students were surveyed at the two schools. The parochial high school had a female enrollment only; the public high school was coeducational. A brief description of the schools and the surrounding area was given.

The null hypothesis that high internal/external (IE) scores and high educational attitude (EA) scores, taken together, would show no higher relationship to the aptitude scores than either one would, if taken alone, was assumed. Secondly, it was hypothesized that if IE and EA scores were held constant, no significant differences in aptitude for predominant attendance BIA, public, or parochial schools would be found. The first hypothesis was tested by t tests of correlations of selected attitude scale sub-groups with ASVAB VE, AQ, and AA scores. The second hypothesis was tested via one-way analysis of variance for the type of school attended and attitude/ASVAB scores. Selected between mean

t tests were computed comparing the public and parochial groups and other groupings (including the teacher samples).

The samples were analyzed for normal distribution and reliability. While the IE and EA scores were roughly normally distributed for the sample, the combined IE/EA scores were highly skewed to the left, and the ASVAB scores were highly skewed to the right. Male IE and EA scores were removed from calculations due to low reliability. Order of presentation of the IE and EA scales was found not to be significant.

Testing the first hypothesis showed that while IE/EA scores predicted aptitude scores better than EA scores alone (17 significant correlations out of 30 versus 10 out of 30), IE scores were the best predictors (22 out of 30 correlations were significant). The AA scores had the most significant correlations, and the groups with the best predictions were females and 12th graders. The second hypothesis was upheld, in that none of the F values for the 14 attitude or ASVAB/attitude scores compared with the type of school predominantly attended reached significance. However, a trend toward a progression of scores, highest to lowest, from parochial to public to BIA attendance, was noted. Since all ASVAB/attitude means were not in this progression, it was concluded that not all variance could be accounted for by non-attitudinal factors.

Significant correlations of IE and EA scores were found on a number of Social History indices, including: small family size, employed father, either high or low socio-economic status, and consistent long- and short-term self-concept responses. Of the few significant between mean t tests, it generally was found that older students tended to show less internal control.

The teacher samples showed significant differences, between public and parochial school samples, in age (older at the parochial school), years teaching experience (more for the parochial teachers), and felt administrative support (greater at the parochial school). Non-parametric comparison of curricular/administrative differences of the two schools gave an approximately equal over-all rating on 17 comparison items.

Student interviews (conducted only at the parochial school) found the students liking their school due to individual attention received there. Informal discussions with teachers at both schools revealed that both groups felt the parochial teachers had a better chance at controlling their students, with the result being a better academic environment resulting from stricter behavioral control.

Conclusions

The ASVAB scores for the schools surveyed seems to confirm the previously documented educational lag of Navajo students. Since the most significant correlations between aptitude and attitude score-groups were between ASVAB and IE scores, the relationship between the IE scale/construct and aptitude measures seems consistent. However, in terms of differentiation between high and low attitude measures versus aptitude measures, Q_1 and Q_2 of the EA scores seem more clearly to delineate differences than Q_1 - Q_2 or Q_3 - Q_4 .

of the EA scores. Thus, each attitude scale is useful, but in different ways. Since the distribution of the combined IE/EA scores was highly skewed, the present researcher concluded that combined IE/educational attitude scores are not useful and/or meaningful for this sample and/or these attitude scales. The between mean t tests relating to IE scores and age (or age/grade, as calculated here) were not consistent with previous findings (i.e., that older students would be more internal). The higher IE scores for younger students found here seem better explained by Bryde's hypothesis of lower achievement scores and greater personality disorientation among Indian students, in an inverse ratio increasing each year after completion of the lower elementary grades.

While no significant analysis of variance results were found, an interesting trend was found, in that students with predominant attendance in parochial schools seemed to be more likely to have higher aptitude scores after controlling for attitude scores. Since the trend was not absolute, more than high aptitude seems involved in the reason for the higher ASVAB/attitude scores. The finding is weakened by the lack of inclusion of students who were currently attending a BIA school.

One general difference seemed to emerge differentiating the public and the parochial school. From both parametric and non-parametric sources, it was observed that more discipline and control seemed to exist at the parochial school. This may have been reflected in the teachers' morale and/or the students attitudes and manifested aptitudes. This is a general finding, without strong statistical backing, which shows promise for further study.

The significant correlations found between IE and EA scores on Social History indices found no surprising results: smaller families and higher socio-economic status yielded more desirable IE and EA scores. However, the finding regarding the cross-check for long- and short-term self-concept leads this researcher to wonder of there may not be some relationship between IE and self-concept for Indian students.

While the results found here seem to indicate that internal control may actually decrease with advancing years in school, this finding should be tempered by the realization of the small sample size utilized here, and the lack of inclusion of a BIA high school in the sample. However, the finding may suggest that, if internal/external control and educational attitudes are related to aptitude/achievement manifestation, then Indian achievement might be increased by teaching internal control, as MacDonald (1972) cited that it can be. But, such teachings should probably be voluntary, following Gordon Allport's suggestions regarding cultural assimilation versus integrity:

For those who wish to assimilate, there should be no artificial barriers placed in their way; for those who wish to maintain ethnic integrity, their efforts should be met with tolerance and appreciation. (Allport, The Nature of Prejudice, p. 480)

The findings regarding the differences between the school systems may deserve further study; at very least, they would re-emphasize the need for periodic study of each system of the other types, to try to find things that they can use and/or improve on in their own system.

Future studies relating Indian attitudes and achievement should try to involve all three types of schools serving the Navajos; also use of achievement, rather than aptitude, test results would make the findings more comparable with previous research. If future internal/external control and education attitude combined scores are to be correlated with aptitude/achievement scores, it would probably be well to use a more recent educational attitude scale that has been attenuated for socially desirable responses. The present findings of control and administrative support of teachers deserves more study in the future, in terms of possible better delivery of an education system to the students to help raise Indian achievement levels.