

**Navajo Culture and Family Influences on Academic Success:
Traditionalism is not a Significant Predictor of Achievements Among
Young Navajos**

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Navajo youths fare poorly in formal schooling and a key explanation has been sought in their cultural investment in the Navajo way of life. A common assumption asserts that the greater this investment, the more these young people are at risk of educational failure. Results from this field study favor a very different view of the relationship. Using data from 451 young Navajos, it was found that there may be no relationship between the academic achievement and behavior of these young people and their multifaceted involvement in Navajo culture. Data were obtained from these youths during their attendance at 11 schools in the Navajo Nation. Youth participation in ritual activities, cultural conventions, and language use was not predictive of their educational failure or disengagement from school. Yet, the family affects academic performance and goals, as does gender. The role of tribal cultures in the education of American Indian youths deserves more thoughtful study.

Navajo Culture and Family Influences on Educational Success

American Indians have the lowest academic attainment of all minorities (Digest of Educational Statistics, 1993), and have fared worse in their educational careers than any other minority group (Swisher, Hoisch, & Pavel, 1991). This educational statement applies to the Navajos. Less than 60% of Navajo 9th-grade students eventually graduate from high school. In the states of Arizona, New Mexico, and Utah (where the majority of Navajos live), American Indians and Hispanics share the lowest ranking on

high school completion (1990 Census: Housing & Population Characteristics of the Navajo Nation, 1991). Thus, there is a strong concern for retention and attrition of American Indian students (Radda, Iwamoto, & Patrick, 1998). Deyhle & Margonis (1995) found that Navajo women were more committed to family relations than to school achievement. Chadwick, Albrecht, & Bahr (1986) found that assimilated Navajo students had higher grade point averages than more traditional Navajo students did.

This information further underscores the lack of Navajo success in formal education, and occurs in spite of the high achievement motivation and aspirations often expressed by Navajos (Rindone, 1988). While Radda et al. (1998) found that American Indian students have low achievement and overall motivation, when the issue was further explored it seems they were most motivated when school was thought of as having a sense of purpose (i.e., for getting a good job). The Navajo Nation has not been blind to the matter and has focused attention on the issue by releasing formal education statements on goals for schools serving Navajo students, building tribal "contract" schools, devoting pages to educational news in the tribal newspaper, and pouring dollars into the tribal scholarship program.

The relationship between traditional culture and education has been contentious for many years. The history of education on the Navajo reservation includes outright attempts to convert Navajos to Christianity, and therefore civilize them in both private mission schools and boarding schools. Less drastic have been attempts to assimilate Navajos through public school education. Tribal or contract schools came into existence due to the tribe's effort to stem the cultural genocide (to one degree or another) practiced by the various other types of schools (Roessel, 1979).

It has generally been assumed that for the Navajo child to achieve academically, all that is inherently Navajo about that child must be eliminated and replaced with mainstream beliefs and lifestyles. Although this mainstream view has dominated the

education of American Indian populations, the question must be raised as to whether this is the correct perspective with which to attribute the underlying failure of Navajo youths in education.

The dismal record of academic achievement among Navajo youths has posed questions concerning cultural barriers. Specifically, does attachment to Navajo culture have an adverse effect on academic achievement for Navajo youths? In building this study, several issues became readily apparent to this young Navajo scholar: (a) traditionalism is complex and how it has been portrayed in the literature has obscured this complexity; (b) the study of the influence of traditionalism has resulted in conflicting findings; (c) numerous past studies have suffered from research design and methodological problems; and (d) there has been a general lack of statistical sophistication. However, recent studies suggest that academic achievement among American Indian may be improving (Coggins, Williams & Radin (1997); Radda et al, (1998).

The present study addresses the inherent complexity of Navajo traditionalism through the use of empirical design methodology grounded in theoretically embedded concepts of Navajo culture with a large random sample of young Navajos. Furthermore, hierarchical multiple regression models were utilized to analyze the influence of the various measures of Navajo traditionalism on the academic success of Navajo youths.

As an academic who not only studies Navajo societies, but who has also walked the path of mainstream educational success as a Navajo Indian, this study is a Native researcher's attempt to contribute to and enlarge the knowledge base. Alvin Josephy, Jr. (1993) has emphasized the importance of American Indians asserting themselves to the world in celebrating their respective heritages and cultures. In order to assess the impact of traditionalism, it was imperative that the conceptual design best reflect Navajo culture. As such, this study centers on Navajo traditionalism, its diversity, and its varied

consequences for academic achievement. Using survey data on 451 Navajo youths, the study takes issue with the purported negative effect often attributed to traditionalism in research studies. Rather, it posed the hypothesis that a differentiated model of Navajo traditionalism will reveal a more complex picture, with both positive and negative outcomes in education.

Although the Navajo world stands apart from mainstream culture, the latter's influence is present in Navajo society. Differences in cultural attachment (i.e., the extent to which one believes and practices cultural ways) that are inherent in the lives of Navajo youths underscore the value of explaining variation in traditionalism (i.e., culture as practiced before the significant influx of American culture). Most past research on Navajo culture recognized variation in types of traditionalism (i.e., language and ritual involvement), but did not investigate such variation in levels of traditionalism (i.e., ranges of attachment). Navajos have generally been presented as homogenous in their cultural attachment. However, through various events, such as World War II, forced school attendance, railroad expansion, increased tourism, technological advances, and attempts to convert Navajos to Christianity, Euro-American cultural influence is now present in Navajo society and contributes to variations in traditionalism. Due to the varying impact of mainstream society on Navajo youths, they are unlikely to all exhibit the same level and configuration of traditionalism. Clearly, the question of diversity in traditionalism warrants investigation.

Furthermore, the importance of the family in Navajo society has been well documented by past research (Kluckhohn & Leighton, 1974), but little is known about its effect on the academic achievement of Navajo youths. For example, that Navajo society is matriarchal has long been of interest to researchers. The descent of clan, inheritance, and residential patterning all emphasize matriarchal descent lines. In contrast to mainstream American society, these types of societies demonstrate relatively high

levels of female power and influence (Lamphere, 1990), where women are equal with men (Deyhle & Margonis, 1995; Roessel, 1981;). But what influence does the family have on the achievement of youth?

Goals of Present Study

The present study sampled a large number of Navajo youths that attended every type of school available. It utilized a multifaceted model of Navajo traditionalism to: (a) examine both positive and negative effects of traditionalism on academic attainment, and (b) investigate gender differences in achievement that would be of particular interest because Navajo society is matriarchal.

The issue that attachment to traditional native culture has only negative effects on academic attainment deserves further investigation (Huffman, Sill, & Brokenleg, 1986; Rindone, 1988) in order to substantiate or refute this common idea. Indeed, due to the complexity of Native societies many studies explicitly call for research on cultural patterns and, specifically, the concept of traditionalism on the retention and attrition of American Indian students (Noley, 1990; Platero, Brandt, Witherspoon, & Wong, 1986).

Where there is now an alleged negative connection between traditionalism and schooling, a more positive interpretation of the relationship could be that tribal identity and cultural practice have positive effects on identity, self-esteem, and creativity. Native students who identify with their culture and traditions may actually be better students.

The Navajo Way, as a metaphysical belief system, emphasizes beauty, harmony, and balance. It derives from teachings of the Holy People. Perhaps as youths identify themselves as Navajo (Diné), which translates as “The People,” and this association is perceived positively, the higher their self-esteem. Navajo cultural activity requires considerable creative energy and input, for example, in making rugs and silversmithing. Navajo youths who engage in such cultural activities then gain experience in applying

their creative energies. The resulting positive identity, self-esteem, and creativity may then figure prominently in student academic achievement (Cleary & Peacock, 1998; Radda, et al, 1998). The more these attributes are valued, the more likely students will succeed in the academic world (Reyhner, 1992).

Given the insights provided by other researchers, speculation abounds concerning the relationship between Navajo culture and academic performance. If traditional culture does affect achievement, is the effect only negative? Do measures of traditional culture indicate they are adverse factors in education? How does traditional Navajo culture influence the educational outcomes of Navajo youths? If traditional culture does not influence educational outcomes, what does then? We may have been making the wrong assumption about American Indian culture. Whatever the results, the analysis addresses the complex nature of traditionalism by evaluating the influence of its multiple dimensions. The matriarchal focus in Navajo society culture is also a relatively unexplored facet of the relationship between Navajo culture and academic performance.

Linking Navajo Culture, Family and Education

Traditionalism encompasses a broad spectrum of Navajo life. The educational outcomes of traditionalism are not straightforward, nor are the results consistent across studies. Rindone (1988) found that high achieving Navajos embrace traditional Navajo family values. A large college study (Huffman, Sill & Brokenleg, 1986) also found that American Indian students who retained their traditional identity and heritage were more likely to succeed academically than those who did not. Additionally, Lin (1990) found that Indian students with a traditional orientation outperformed their peers with modern orientations.

Other studies have obtained results that identify the less traditional Indian students

as more achievement-oriented in school than traditional students. These students (who were placed in the foster care of White families) outperformed American Indian youth who remained in the parental household (Chadwick, Albrecht & Bahr, 1986).

Additionally, in a study by Giles (1985), where students were placed on a continuum that ranged from “American middle class value orientation” to “Native American value orientation,” the students nearer the American middle class value orientation were more likely to finish high school. Finally, Leighton (1964) observed that Navajo college students with a future orientation (Anglo characteristic) achieved more than students with a present orientation (Navajo characteristic).

What further complicates the issue is that the manner in which traditionalism is empirically measured (both explicitly and implicitly) varies from study to study. The preceding studies provide an opportunity to illustrate this point. Most studies invoke some form of a dichotomy based on values and orientations: modern/Anglo versus traditional/Navajo (Leighton, 1964; Lin, 1990; Rindone, 1988), or a range of these orientations, (Giles, 1985). One study (Huffman et al, 1986) based traditionalism on students' “yes” or “no” responses to three questions: “Do you speak your native language?” “Have you had a ceremony performed on you?,” and “Is your permanent home on the reservation?” Another study compared the effect of traditionalism in the form of only considering the respondent's feelings about whether they were “Indian” or “White”(Chadwick et al, 1986).

The conceptual design of traditionalism used in this study is shaped by the experiences of the researcher as a Navajo and examined through the lenses of sociological perspective and empirical methodology. As such, the behavioral and material aspects of Navajo culture are emphasized, since differences in values are expressed in everyday life and are considered to be embedded within the construction of these individual and measurable aspects.

Three domains of Navajo traditionalism resulted from two separate factor analyses on information pertaining to Navajo life. The first domain, *ritual behavior* refers to Navajo curative ceremonies. While these ceremonies are integral to the spiritual belief system of the Navajo people, the activities associated with them—attendance, consultation and participation-- can be exclusive of one another, as well as mutually inclusive.

Attendance at a ceremony does not require direct participation. A person may attend simply as a spectator in portions of a ceremony that are allowed to be viewed by a collective. Similarly, participation does not necessarily require consultation. The willingness to consult Navajo healers requires more serious commitment to the belief system of metaphysics that encompasses traditional Navajo beliefs. The purpose of these rituals is to return the ailing Navajo to balance and harmony, thereby curing the patient of his illness. The two more prevalent ritual activities are the Squaw Dance (a.k.a. The Enemy Way) and the Yeibicheii (a.k.a. The Night Chant).

The second domain, *cultural conventions*, entails recognized Navajo activities, but is not specifically reflective of spiritual beliefs related to the Navajo Ways. These activities are practiced by people who participate in Navajo ceremonial life, but they are not exclusive to them. People who do not believe in Navajo Ways can still express traditionalism by practicing the activities of silversmithing, rug weaving, and herding sheep. However, most of these cultural practices have a connection to the spiritual belief system of the Navajo. For example, Navajos believe that weaving was taught to them by a Deity and has its own songs and prayers. Furthermore, cultural conventions also concern attachment to Navajo heritage, which indicates the importance of maintaining ties with their Navajo background.

The third domain, *language use*, indicates how well Navajo is spoken and understood by Navajo youths. In definitions of culture, the domain of language is usually considered an important hallmark. The Navajo language differs from English in

intonation, with many complex inflections that can change the meanings of words. This difference requires precise intonation when speaking. Navajo is also largely movement or action-oriented with a strong emphasis on verbs (Kluckhohn & Leighton, 1974). In the Navajo culture the spiritual belief system is practiced in the native tongue, thereby emphasizing the importance of comprehending Navajo.

Due to the resulting empirical design of my measures of traditionalism, past studies that are concerned with the effects of traditionalism provide little guidance on the direction of effects for varied domains of traditionalism. Out of necessity, this researcher cites studies that appear to be related to her conceptual design of traditionalism. Given the preceding contrasting results, it seems safe to say that the influence of traditionalism on academic achievement is expressed in both positive and negative educational outcomes.

Navajo Traditionalism

Kluckhohn and Leighton (1974) found that men tend to have greater involvement in traditional Navajo ritual behavior than women. This suggests that ritual behavior has a negative influence on educational outcomes, in part because women tend to perform better academically than men. However, the measure of ritual behavior in the present study includes activities in which both males and females can participate, an issue ignored by Kluckhohn & Leighton. In actuality, this present measure should minimize a gender interaction effect of educational outcomes on ritual behavior. While Navajo women have similar privileges as men in religious behavior (Reichard, 1928), the social reality of high fertility and economic responsibility to her home has decreased the likelihood of her extensive involvement in ceremonial activity (beyond the role of patient and helper). Instead, while Deyhle & Margonis (1995) emphasized her commitment to home and hearth, Frisbie (1982) claimed that there was controversy about exactly what

role Navajo women play in ritual activity.

Ritual behavior requires a philosophical commitment to balance and harmony inherent in the Navajo Way, in contrast to the dominant society's emphasis on individualism and competition. For this reason, those engaged in ritual behavior might not realize the mainstream value of academic achievement. On the other hand, participation in ritual behavior requires attentiveness, willingness to help, and involvement in a group process that ritual behavior often entails. These same attributes are also associated with achieving academically. Because of this seeming paradox, the researcher cannot specify the direction of influence for ritual behavior.

The individual items that comprise the *cultural conventions* measure are concerned with factors of Navajo life that require creativity and hard work, such as silversmithing, rug weaving, and herding sheep. Furthermore, the *cultural conventions* measure includes items that deal with identification of heritage, the importance of respect in the Navajo community, and whether the youth's future job would help other Navajos. These are items that are concerned with self-esteem and pride. Creativity, hard work, self-esteem, and pride figure prominently in educational attainment (Cleary & Peacock, 1998; Radda et al, 1998; Reyhner, 1992). Therefore, I predict that cultural conventions will have a positive influence on educational outcomes.

McLaughlin (1977) found correlation's between bilinguals and poor academic performance. Another study (Platero et al., 1986) found that high school dropouts are more likely to come from families that have retained the Navajo language. Furthermore, high achieving Navajos indicate that they communicate best in English (Rindone, 1988). Hence, for the domain of *language use*, I expect a negative influence on educational outcomes.

Family Influences

The Navajo philosophy differs significantly from the mainstream's values of

individualism and competition in academic success. Therefore, it would seem to suggest that parental involvement in Navajo cultural practice and activities would lower a child's academic achievement. The implications of parental encouragement and support for education and parental educational aspirations are rather straightforward: The more parents encourage and support their children's efforts in education and the higher the parents' educational aspirations, the greater the academic achievement of their children.

Navajo society is matriarchal, with the benefits and status distinctions associated with societies of that type. As such, Navajo women would be expected to reinforce traditional Navajo culture. In this case, identification with the mother would have a negative effect on academic achievement because education is a mainstream institution. However, research indicated that Navajo women were less adverse to change than Navajo men, and change could apply to education (Rapport, 1954). Also, the treatment of girls in Navajo society parallels the treatment of boys in Anglo society. In this case, education would be a valued endeavor for girls in Navajo society (Abraham, Christopherson, & Kuehl, 1984). Further, Lamphere (1990) stated that Navajo women were committed to education. Yet, Deyhle and Margonis (1995) ascertained that education was not the institution by which young Navajo females attain status in the Navajo community. Navajo women have historically been the primary economic providers in their homes, and the influence of the changing economy and its associated correlation with educational attainment and income have become pronounced (Albrecht et al, 1983). With all these factors considered, this researcher concludes that identification with the mother will have a positive effect on academic outcomes. As men tend to be more involved in traditional Navajo ritual behavior than women, identification with the father is likely to be negatively correlated with academic achievement.

In American society, as a whole, family socioeconomic status and parents' educational level predict academic success (Sewell & Shah, 1967). However, Navajo society is different from the mainstream. American Indians are amongst the poorest segments in society and their educational attainment is very low. In light of this, family income and parents' educational level have been identified as poor predictors of college achievement by American Indians (Rindone, 1988). Yet, there is acceptance of the importance of a college education. A considerable number of American Indian tribes offer scholarships to attend college. Specifically, the number of Navajo scholarship recipients has increased dramatically from 25 in 1953, to 361 by 1961, then to 1,715 in 1978 and 3,153 in 1996 (McCloskey, 1998). The parents of these recipients were generally much better educated than were their parents.

Given the relative isolation of Navajoland, Navajos have maintained a high rate of fluency in their native language when compared with other tribes (Utter, 1993). Yet, technology has exploded and increased its presence on the reservation, simultaneously reaching into the most remote sectors of the Navajo Nation. This growth is evident in the growth in the numbers of homes with modern conveniences on the Navajo Nation from 1966 to 1998: 4,650 to 30,420 homes with electricity and 934 to 25,166 homes with water (M. Went, Manager of Finance at Navajo Tribal Utility Authority, personal communication, August 13, 1999). With the modern institutions and beliefs of mainstream American life possibly influencing American Indians more now than in the past, status differences on family income and parents' education may positively influence academic success at the present time. Hence, the mainstream's influence may be such that whereas family socioeconomic status and parents' education level may have been poor predictors in the past, the culture may have changed. This is important to explore because there is more variation in income and parents' educational level now than has been the case in the past.

Large families are encouraged by the Navajo philosophy on procreation (McCloskey, 1998), even when it strains poverty level household incomes (Deyhle and Margonis, 1995). With this in mind, the past negative results associated with traditionalism lead this researcher to predict that family size has a negative influence on educational outcomes.

Does living outside the Navajo Nation contribute to better educational outcomes? If so, is this because these students are learning the mainstream values and skills that are necessary to achieve academically? Or does the fact that students are not living in Navajoland really mean that they are living transient lives? How would that affect their educational outcomes? Because there is no literature to guide the researcher's predictions, she does not specify the direction of influence for residential history on educational outcomes.

Navajos parent girls differently than boys. The treatment of boys in Anglo society parallels the treatment of girls in Navajo society, especially regarding education (Abraham, Christopherson & Kuehl, 1984). Deyhle and Margonis (1995) stated that Navajo women feel males are not dependable for economic support; this sentiment should influence how they parent their children. Navajo society has a distinct matriarchal focus with a matriarchal inheritance, descent, and residential pattern (Kluckhohn & Leighton, 1974). For these reasons, this researcher expects that male status will have a negative influence on educational outcomes.

Sample, Measurements, and Analytic Framework

Building upon a year of field work in the Navajo Nation area and a pilot study, this researcher administered questionnaires to 469 Navajo high school students. Eighteen students from one high school were administered the questionnaires as part of a separate study of high achieving Navajo students. Since they were not randomly

selected, they were not included in this study. The subjects for this research are therefore 451 Navajo youths who were attending 11 high schools in the eastern and central regions of the Navajo reservation area in the spring of 1991. These schools are located both on the reservation and in border towns. The students constituted 143 freshmen, 138 sophomores, 104 juniors, and 65 seniors (one had missing data). A random sample was generated from student rosters and the data were gathered at the schools. Though most of the students came from the eastern region of the Navajo Nation, there appeared no reason to believe that Navajo students differ in educational experience by region (Tempest, 1987), though regional variation does exist over time as economies have changed (Lamphere, 1990). Two of the public schools were located in the central region of the reservation (N = 89), and one school drew from the entire reservation for its student body (N = 51).

Survey questionnaires were constructed from a review of the literature, analysis of qualitative interviews with high school and college students from the Navajo reservation, interviews with two cultural practitioners (one diagnostician and one medicine man), faculty suggestions, and the researcher's personal experience embedded in Navajo family and culture. The first part of the instrument contained items on relations with family, school, teachers, and peers, and a variety of educational dimensions, such as reported grades, achievement beliefs, which could be answered by the entire sample, and whether Navajo or not (126 additional students in the study were not Navajo, total sample N = 595). The second part focused on Navajo culture, in particular the traditionalism of the Navajo students.

Following pretests in the field, the researcher worked with a long-term science teacher in an eastern Navajo region high school to seek high schools for the study. The resulting sample encompasses the range of schools that serve Navajo students: public, private, Navajo tribal contract, and Bureau of Indian Affairs boarding schools.

Appendix A lists the independent variables. The Navajo traditionalism variables include *ritual behavior, cultural conventions, and language use*, which were developed from two separate factor analysis procedures (see Willetto, 1996 for a more detailed discussion). Family process is indexed by five measures: parental cultural practice, parental encouragement and support for education, identification with the mother, identification with the father, and parents' educational aspirations for the student. Family background is measured by four items: the level of parents' education, family income, residential history, and family size. Personal attributes include the gender of the student.

The dependent variables were measured by the three indicators of academic outcomes: (1) The grades the student receives, as measured by the question, "What kind of grades do you receive?" ($r=.90$ with student's science course grade); (2) School commitment ($\alpha = .662$), measured by three items involving attitudes on school and constructed as a summated average and (3) College aspirations ($\alpha = .915$), measured by two items concerning the importance of going to and graduating from college.

The determinants of Navajo traditionalism and educational outcomes were examined in hierarchical regression models to determine whether family processes explained the influence that family background has on Navajo traditionalism, and whether family processes and background explain the influence that Navajo traditionalism has on educational outcomes. Separate ordinary least square estimation models (OLS, multiple regression), estimated the coefficients for Navajo culture, family processes, and background influences on the dependent variables (school commitment, grades, and college aspirations).

Results

Overall, a traditional orientation to Navajo culture was modestly correlated with the

grades, school commitment, and college aspirations of youths in the study. Personal investment in cultural conventions was most strongly correlated with evidence of an achievement orientation, followed at a distance by involvement in Navajo rituals. Only language use was consistently negative in its association with academic performance, school commitment, and college goals. However, all these associations, except those involving cultural conventions, faded to insignificance when family processes and origins were added to a series of hierarchical regressions. In addition, girls did consistently better than boys on achievement orientation, as can be expected in a matriarchal society. Family processes and origins tended to have weak positive effects on school outcomes generally, but they were relatively insignificant.

The analytic strategy began with estimates of the effects of Navajo traditionalism on educational outcomes, and then asked whether family processes explained these effects and origins. Given the modest correlations of traditionalism and these outcomes, we have little to explain. The one exception involved college aspirations. Youths involved in cultural conventions were more apt to be oriented toward college, when compared to other adolescents, but this modest effect was entirely explained by family influences, particularly the college aspirations of parents. For more detailed explorations of these findings, each analysis is sequentially described, beginning with the prediction of grades.

Grade Point Average

An orientation to Navajo culture exerts no influence on the grades that youths achieve (Table 1). In contrast, Adams et al, (1977) found that American Indian students who had been on a foster placement program (in Anglo homes) had higher first semester college grade point averages than reservation or Bureau of Indian Affairs students. More consistent with the outcomes of this study, Colorado College Indian

students, traditional and generalized (acculturated), did not differ in grade point averages (Wright, 1972).

The family does emerge as consequential in determining grades, as does gender. Adolescents who receive good grades are most likely to identify with their mothers, and have parents of higher status defined by education and family income. However, identification with the mother is not influenced by family background. Girls do better academically than boys, though no other factor seems to make a difference, such as paternal identification, residential history, or family size. Furthermore, identification with the mother and family background are largely independent influences.

Contrary to expectations, ritual behavior does not make a significant difference in grades, although the effect is negative. Thus, it may be, as suggested by Kluckhohn & Leighton (1974), men are more involved in ritual behavior than women. Furthermore, as girls do better academically, then males' greater involvement in ritual behavior may depress the overall effect. This explanation fits well with the overall results of the study. However, the relationship did not reach significance. Further, this researcher hypothesized that cultural conventions would positively influence grades. The direction of effect indicates that this is possible, but the parameter estimate did not reach significance. Similarly, this researcher expected language use to negatively influence grades. The direction of effect indicates that this is likely, but the parameter estimate did not reach significance.

School Commitment

Navajo traditionalism and family processes both have modest influences on the school commitment of young people, and gender once again emerges as consequential in determining educational outcomes (Table 1). Youths who are highly committed to school are more likely to engage in the cultural practices of the Navajo Nation, such as

rug weaving and silversmithing. Furthermore, these youths identify with their mothers and are most likely to be female. Socioeconomic origins do not affect school commitment and neither do any of the other types of parental processes. The influences of cultural conventions, identification with the mother, and gender are largely independent. Yet, Carroll's (1978) study on Haskell Indian students concluded that those with traditional cultural orientations were more likely to drop out and they fared worse on academic measures than non-traditional students.

Ritual behavior, language use, parental cultural practice, parental encouragement and support for education, identification with the father, parental educational aspirations, and residential history all fail to influence school commitment. Although the beta coefficients did not reach significance, the effects were all in the predicted directions.

Parental education and family income were expected to influence school commitment. However the effect of parents' education and family income are neither detrimental nor beneficial, possibly due to the transitional phase that socioeconomic measures are in when they are applied to explaining academic success for Navajos. Family size also does not influence school commitment, although the direction of effect is positive. This researcher predicted that family size would negatively effect school commitment due to the philosophical importance of procreation held by Navajos. A possible explanation may rest upon the influence of brothers and sisters. The larger the family, the more potential there is for siblings to stress the importance of school commitment.

College Aspirations

Navajo traditionalism also had no effect on the college aspirations of adolescents, as did socioeconomic background (Table 1). Nevertheless, family process and gender both exert influences on the youth's college aspirations. In fact, high college aspirations are

most likely held by the children of parents with high educational aspirations, and are also most likely to be girls. None of the other parental processes emerged as consequential in predicting college aspirations. Consistent with these results are those by Platero et al, (1986) who found that a traditional cultural orientation does not negatively affect school achievement.

Parental educational aspirations and gender both have independent influences on college aspirations. However, cultural conventions did have a significant positive effect on college aspirations in the first set of models. This effect did not hold when family processes were added in the second model. Hence, family processes influence Navajo traditionalism. Furthermore, language use has a significant negative effect on college aspirations in the first model. This relationship holds when family processes are added in the second model. However, language use no longer influences college aspirations when family background is added in the third model. Hence, family origins influence the effects of Navajo traditionalism.

Discussion, Conclusion, and Implications

This analysis provides support for the independent influences of Navajo traditionalism, family, and gender on educational outcomes. Although the effect was found to be modest at best, the more that youths were involved in the cultural conventions of the Navajo Way, the greater their commitment to school. Consistent with the influences of the matricentric culture of Navajo life suggested earlier, young Navajo girls consistently outperformed their male counterparts.

Most significantly, there was no support for the argument that traditionalism has a negative effect on the academic success of Navajo young people. In the remainder of this section, this researcher will consider the most important results: First, the lack of negative effects of Navajo traditionalism on educational outcomes; second, the positive influence of family processes; third, the influence of family background; and last, the

consistent effect of gender.

Navajo Traditionalism

Taken together, the effects of the multifaceted model of Navajo traditionalism on education are modest. But we also find no empirical support for the expectation that the greater the student's involvement in traditional culture, the worse he does in school. In fact, there are no negative results associated with Navajo traditionalism. Similarly, Jeanotte (1981) found that traditional students suffered no more difficulties in school than other students.

My contention of both positive and negative effects of Navajo traditionalism was not supported by the results of this study. We see that although there were differential effects for the various measures of Navajo traditionalism, they did not reach significance. The one finding that demonstrated a relationship between Navajo culture and education was the positive influence of cultural conventions on school commitment. But the effect was quite modest. It is important to note that cultural conventions entail hard work (rug weaving, silversmithing, livestock maintenance, and ownership) and self-respect (attachment to Navajo identity and heritage, importance of respect in the Navajo community), which may be associated with achieving academically.

What about the lack of effect for ritual behavior? I did not predict the direction of effect that ritual behavior would have because there is a lack of substantive literature to guide my prediction. Nevertheless, I interpret the lack of effect for ritual behavior to be a positive result for Navajo culture in general. That is, whether one is involved or not in traditional ritual culture has no consequence for the academic success of Navajo youths. Young Navajos may engage in ritual behavior and not be concerned that this involvement will somehow adversely affect how well they perform academically.

Still the question of why ritual behavior had no effect must be addressed. A potential

explanation is that American-style education is not a Navajo institution. Thus, the mainstream regard for academic achievement may not be valued by those involved in ritual behavior. However, this explanation is weak because we know that Navajo parents with higher levels of education have a positive influence on their child's engagement in ritual behavior (Willeto, 1996). These parents may view their promotion of ritual behavior as an effort to stem the cultural genocide that they may have experienced in their own formal schooling. In addition, ritual behavior entails attentiveness and involvement in a group process, which may actually promote cooperation more than competition in academic success.

The lack of negative effect for language use is a very important result. Language is a central element of culture and is often the target of elimination because it is often viewed as detrimental to educational success when it is not the mainstream's tongue. Although the direction of effect was consistently negative, the parameter estimate never reached significance. The importance of this finding cannot be overemphasized, as the native language is vital to the extensive ceremonial life of the Navajo people. Most ceremonies are conducted exclusively in the native tongue and many medicine men discourage the use of English within the confines of the ceremonial hogan. Furthermore, while Navajos demonstrate relatively high levels of Native language use, there is an important concern regarding contemporary language loss, particularly among the youth. Since there was no relationship found between language use and academic success, retention of the Navajo language should be a high priority that comes at no cost to the youth's academic achievement.

Family Influences

Identification with the mother positively influenced educational outcomes, grades, and school commitment. Adolescents who make better grades and are strongly

committed to school generally identify with their mothers. This finding underscores the important position of the mother in the Navajo family. Hence, although the traditional culture of the Navajo Nation has no substantive influence on the educational outcomes of young Navajos, it is important to Navajo society that the mother's influence on educational outcomes is positive.

Why does identifying with the mother exert positive influences on grades and school commitment? A possible explanation may be that Navajo women are less adverse to change, and this could apply to education. Furthermore, there is an association between income and education on the Navajo reservation (Albrecht, Bahr & Chadwick, 1983); and because mothers have historically been the major contributor to the family's economic level, the mother could view educational success as beneficial for children and could reinforce the importance of academic success. Somewhat similar to the influence of parental identification results that were found, Coggins et al, (1997) also found that identification with Ojibwa mothers (with traditional values) had a positive influence on their children's academic performance, while no comparable relationship of identification with the Ojibwa father was noted.

Parents' education and family income had positive influences on grades and were in the predicted directions. Yet, they are not strong predictors. Thus, the earlier findings that show parents' education and family income not to be key predictors of academic success for Navajos still holds. These results may indicate the transitional phase of parents' education and family income in Navajo society. Navajos are one of the poorest subpopulations in society, and they are very poorly educated, which is why parents' education and family income were thought to be poor predictors of academic success (Rindone, 1988). However, educational variation among parents is occurring, as evidenced by the steady increase in scholarships awarded by the Navajo Nation Scholarship Office (McCloskey, 1998). Also, parents' education and family income are

highly correlated. Thus, these socioeconomic measures are in turn becoming positive influences and eventually may become stronger predictors of educational outcomes than is the case now.

Navajo girls consistently outperformed their male counterparts; this is very consistent with my interpretation of Navajo matriarchal society. In contrast, Deyhle and Margonis' (1995) study found that educational achievement was not salient in the lives of Navajo women. However, their small sample consisted of select females from one community; the majority of whom had experienced the Kinaalda, a traditional puberty ceremony. This would have generated a greater overall level of traditionalism in the sample rather than the random sample utilized in the present study. This sample difference may also explain some of the contrasting results. It is worth further noting that this gender effect is also found among other racial ethnic groups, and in the lower strata of Anglo society. But is this gender effect stronger for Navajo girls than for Anglo girls?

The results of this analysis provide support for the argument that traditional culture has no detrimental effect on educational outcomes. In the one case where there was a relationship between Navajo traditionalism and academic success (on cultural conventions), the effect was positive on school commitment, though quite modest. In addition, families do modestly influence educational outcomes in a positive manner. The most consistent finding was that gender had an independent effect on all three measures of educational outcomes. Being female increased the likelihood of academic success. These findings are important for what they do not represent--a steady link between the traditional cultural attachments and practices of Navajo youths and their academic success and goals. As always, it is vital that this research be replicated to further substantiate these results. A number of other studies also demonstrate no relationship between educational outcomes and cultural attachment (Boutwell, Low, Williams, & Profitt, 1973; Deyhle, 1989; Jacob & Jordan, 1987; Platero et al., 1986).

The findings are based on one cross-sectional sample. Longitudinal research is needed. Discovery of what explains the educational outcomes of Navajo youths remains an important challenge. Part of the puzzle may become more apparent by closely examining larger, macrostructural factors (Ledlow, 1992) which were not directly included in this study, but might be suggested when considering the influence of parents' education and family income on grades.

The implications of this study center on the usefulness of traditionalism as a link between the Navajo Way and children's academic success. Past research that used cultural attachment suffered from inadequate conceptual and statistical sophistication. Traditionalism is multifaceted; this complexity is demonstrated in the different but insignificant effects of traditionalism on education. A more empirically rigorous approach to analyzing traditionalism was undertaken here. Considering all parts of the study, the conclusion of this research is that cultural attachment has no influence on the academic success of young Navajos.

This has important implications for professionals who work with Navajo populations. As formal schooling is a mainstream institution, it is assumed that to succeed, students should become assimilated into American life by shunning their traditionalism. That is simply not true. School success does not require a student to assimilate into the dominant society (Jacob & Jordan, 1987). In fact, other studies on different tribes, such as the Northern Cheyenne, Ojibwa, and Sioux, also demonstrate the importance of maintaining cultural identity (Coggins et al, 1997; Huffman et al, 1986; Ward, 1994). It should not be the policy of educators of Navajo populations to discourage cultural attachment. Recognition of the nondetrimental effect that cultural attachment has on academic success informs educators that there is no reason to denigrate or discourage traditionalism. When educators convert this ideology into established practice, then Navajos, in turn, no longer have to fear that schools will denounce or ridicule their

traditions. The education of Navajo youths can be encouraged in nonhostile environments. This is very significant for while the Navajo Tribal Council in 1985 issued an educational statement concerning implementation of institutional changes that serve Navajo students both on and off the reservation, the tribe has little control over federal, public, and private schools (Keating, 1989). A related concern is that as part of the initial research plan, this researcher was to analyze the effect of school context, coding the schools from the most promotive of Navajo culture to the least promotive. The results from this initial analysis were disappointing; there were no significant relationships between type of school and Navajo youths' academic success.

The implications for the perpetuation of traditional culture are also significant. Navajo families can promote traditionalism without concern for negative educational consequences. In today's society where the pervasive effects of assimilation are seen everywhere, these empirical results can further reinforce Navajos in the importance of continuing their ancestral heritage.

Yet, these results are tempered by the reality of the rather small influence the family has on educational outcomes. While this researcher could detect no direct negative effect of traditionalism on academic outcomes, it presents a challenge that the family has such a small positive effect. It may be that Navajo families may not choose to actively encourage their youths to excel. The ideology of education's importance may be expressed by the larger Navajo society, but the active encouragement and support of their children's engagement in education may not be seen yet. That is, parental encouragement may not simply be enough (Deyhle & Margonis, 1995). This could be an artifact of the Navajos' past relation with formal schooling when expressions of cultural attachment were actively discouraged and even punished. A more tolerant climate may encourage more active participation of Navajo families in the education of their children, which could result in a stronger connection between Navajo family life and educational

success.

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Appendix A

Description and Measure of Independent Variables for the Analyses on Educational Outcomes.

Navajo Traditionalism

Ritual Behavior: Index of 16 items (scored 0–3) to assess the respondent's ritual behavior. The response categories are identical for each item. Alpha = .946; M = 1.28; S.D. = .81.

1. If the opportunity arose, would you consider attending a squaw dance (summer ceremony)?

[3] Yes [2] Possibly yes [1] Probably not [0] No

2. ... attending a yeibicheii (winter healing ceremony)?

3. ... consulting a crystal gazer (diagnostician)?

4. ... consulting a hand trembler (diagnostician)?

5. ... consulting a medicine man?

6. ... participating in a squaw dance by helping to prepare/serve food?

7. ... participating in a squaw dance by dancing at night/round dance?

8. ... participating in a squaw dance by taking the yarn from the visiting party's horses & cars?

9. ... participating in a squaw dance by going into the hogan during part of the ceremony?

10. ... participating in a squaw dance by giving and/or receiving of gifts?

11. ... participating in a squaw dance by being one of the patients, if it was necessary?

12. ... participating in a squaw dance by helping to build the necessary structures?

13. ... participating in a squaw dance by riding a horse into the other party's homesite?

14. ... participating in a yeibicheii by dancing in it?

15. ... participating in a Native American Church meeting by bringing in the morning breakfast?

16. ... entering a sweat bath to cleanse yourself spiritually?

Cultural Conventions: Index comprises five items: four individual items (scored 0–4) and

one summated composite variable (0–6). The scale is constructed as a summated average and indicates cultural items, not of a religious nature. Alpha = .783; M = 3.5; S.D. = 1.31.

1. In general, how would you say you feel about your Navajo heritage?

[4] Close to that heritage [3] Somewhat close to that heritage [2] Neutral about that heritage

[1] Somewhat less close to that heritage [0] Not close to that heritage

2. How important do you think it is to your parents that you remain attached to the Navajo culture? (Questions 2-4 have identical response categories): [4] Extremely important

[3] Pretty important [2] Important [1] Somewhat important [0] Not important

3. How important is it to you that you be respected in the Navajo community?

4. How important is it to you that your future job help other Navajos?

5. Composite variable of six dichotomous items. Response categories are identical.

A. Have you eaten mutton? [1] Yes [0] No

B. Have you woven rugs? C. Have you herded sheep or goats?

D. Do your parents live in a hogan? E. Does your family have sheep, goats, cattle or horses?

Language Use: Index comprises two items. Alpha = .849; M = 1.67; S.D. = .98.

1. How well do you understand Navajo when spoken to you? (Response categories are identical)

[3] Very well [2] Somewhat well [1] Somewhat poorly [0] Very poorly

2. How well do you speak Navajo?

Family Influences

Parental Cultural Practice: Measured by “Are your parents active in Navajo activities

and rituals?" (0–3 scale). $M = 1.90$; $S.D. = 1.32$.

Parental Encouragement and Support: Index comprises five items (response categories are identical), as follows:

1. How often does a parent or other adult living with you provide a place where you can concentrate on your homework? [4] All of the time; [3] Most of the time; [2] About half o the time, [1] Occasionally; [0] Never.
2. ...check to see if you have done your homework?
3. ...encourage you to do better on tests?
4. ...help you with your homework when you ask them?
5. ...praise you when you do well in school?. $\text{Alpha} = .831$, $M = 2.55$; $S.D. = 1.04$.

Mother/Father Identification: Index of two items (response categories are identical):

1. Would you like to be the kind of person your mother is? [4] Yes, completely, [3] In most ways, [2] In many ways, [1] In just a few ways; [0] Not at all.
2. 2. How much do you depend on your mother for advice and guidance?; $\text{alpha} = .587$; $M = 2.27$; $S.D. = 1.05$. Similar items with father; $\text{alpha} = .686$; $M = 1.74$; $S.D. = 1.09$.

Parental Educational Aspirations: Comprises two items, as follows:

1. How important do you think it is to your parents that you will graduate from college? [4] Extremely important, [3] Pretty important, [2] Important, [1] Somewhat important, [0] Not important.
2. ... you will go to college? $\text{Alpha} = .884$; $M = 3.48$; $S.D. = .89$.

Family Background

Parent's Education: Index of the questions: "What is the highest grade your mother completed?" and "What is the highest grade your father completed?" Range: 0–24. $M = 15.76$; $S.D. = 5.57$.

Family Income: "What is your family's income?" Range: 0–50000. M = 14902.68; S.D. = 12461.51.

Residential History: "How many years have you lived within this area?" Range: 0–19. M = 12.80; S.D. = 4.85.

Family Size: "How many persons live in your family's household?" Range: 2–19. M = 5.94; S.D. = 2.36.