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Evaluation of the College Experience Among American Indian Upperclassman

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EVALUATION OF THE COLLEGE EXPERIENCE AMONG AMERICAN INDIAN UPPERCLASSMEN

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ABSTRACT—This article reports partial findings from a five-year study that examined the attitudes, perceptions, and expectations regarding higher education among a sample of American Indian students attending a predominantly non-Indian university. Most notably, this article examines some of the factors associated with two specific personal assessments of the college experience: (1) the impact of college upon their appreciation of Native American heritage and (2) the level of satisfaction with the college experience.

Key Words: American Indian cultural traditionalism, American Indian education, American Indian higher educational persistence and attrition, higher education personal evaluation

INTRODUCTION

The American Indian education literature is filled with studies that identify and discuss the perplexing difficulty for Native students to persist at the higher educational level. Indeed, the lack of educational success is the prevailing theme in years of American Indian education research.

Notwithstanding, there have been positive developments in the educational pursuits of American Indians. Between 1980 and 1990, the high school graduation rate for American Indians and Alaskan Natives increased from 56% to 66% (Pavel et al. 1998). The pool of college-eligible Native students increased accordingly. In fact, enrollment of American Indians in higher education increased by 68% compared to the 30% increase in college enrollment among the general population during that same period (Pavel et al. 1998). Additionally, Ward (2005) reports that for the first time the American Indian population has recorded a median average of above 12 years of schooling.

Despite these positive developments, chronically high attrition rates continue to characterize the American Indian higher educational experience (Astin et al. 1996; Carney 1999). Two decades ago, Astin (1982) reported that only approximately 6% of American Indian college students complete their educational pursuits through to graduation in the traditional four years. Since then, the situation has not improved significantly (Ward and Snipp 1996; Pavel et al. 1998; Demmert 2001). Thus, there are good reasons for the attention given to American Indian educational attrition the literature.

Given the high attrition rates among Native students, researchers very much need to explore the personal evaluations of Native students' higher educational experiences. In this study, we examine a number of factors associated with the personal assessments of the college experience among a sample of American Indian upperclassmen. Specifically, this paper attempts to explore the relationship between cultural conflict, academic difficulties, financial difficulties, reservation vs. nonreservation background, disposition toward education, and cultural traditionalism, and two personal assessment variables: (1) the impact of college upon
an appreciation of Native American heritage and (2) the level of satisfaction with the college experience.

LITERATURE REVIEW

A number of factors have been consistently linked to the persistence and attrition of American Indians in higher education. Among the more frequently researched and discussed factors are cultural conflict, academic difficulties, financial difficulties, reservation vs. nonreservation background, disposition toward education, and cultural traditionalism. Thus, this paper explores the relationship between these variables and the personal assessment of the college experience.

Cultural Conflict

Cultural conflict is likely the most commonly discussed factor associated with American Indian education attrition (Sanders 1987; Lin et al. 1988; Swisher 1990; Huffman 2001). Over the years scholars have conceptualized cultural conflict in numerous ways and have taken a variety of theoretical approaches to the phenomenon (Swisher 1990; Huffman 1999).

Some scholars have taken a micro-level approach and conceptualized cultural conflict as the personal struggles of Native students who encounter normative and value inconsistencies with those institutionalized in the higher educational campus. Although cultural conflict is conceptualized in a myriad of ways in these micro-level studies (e.g., some have referred to cultural conflict as an inconsistency between specific cultural nuances such as orientation to time or to cooperation vs. competition), it is common to find that cultural conflict is associated with distinct communication styles (Sando 1973; Duda 1980; Ledlow 1992; Au 1993). Thus, the prevailing notion is that cultural conflict emerges from the cultural differences and misunderstandings the Native student must negotiate as he/she proceeds through the predominantly non-Indian institution (Pottinger 1989; Swisher and Deyhle 1989; Garcia and Goldenstein-Ahler 1992; Garrett 1995; Aragon 2002).

Others have taken a more macro-level approach to cultural conflict (Ogbu 1978). Typical among these approaches is the premise that historically produced structural forces, beyond the control of the individual, are responsible for the lack of educational success among many minorities (including American Indians) (Ogbu 1982; Trueba 1988; Foley 1991). In a rare ethnographic study on American Indian classroom dynamics, Donna Deyhle (1992) identified the pervasive nature of cultural conflicts that operate at the micro-level. However, she also argues that these micro-level phenomena cannot be understood outside their macro-level origins. Although her study did not focus on the higher educational experience of Native students, Deyhle’s conclusions are relevant nevertheless:

The decision to leave school is complex. My ethnographic research has shown how leaving school involved culturally embedded factors which pointed toward larger sociocultural and political factors. As I found out, when youth revealed the feelings they had of being “pushed out” of school and “pulled into” their own Indian community, one must look beyond “individual failure” as pivotal reasons for leaving. (1992, 43).

Academic Difficulties

Many researchers have had an abiding concern about American Indians’ academic preparation before entering college (Kleinfeld et al. 1987; Hoover and Jacobs 1992; Cole and Denzine 2002). Kerbo (1981) reported that among a sample of American Indian college students attending a number of Oklahoma universities, the second-best predictor of college grade point average was high school grade point average. Likewise, James et al. (1995) identified the critical importance of secondary preparation to later academic success. Further, using a sample of successful and unsuccessful American Indian and non-Indian university students, Brown (1993) reported a significant relationship between academic preparation at the secondary level and educational success at the post-secondary level.

Unfortunately, there is strong evidence that many American Indians who enter higher educational institutions are poorly prepared for the academic rigor they will encounter. For instance, Pavel et al. (1998) reported only about 24% of college-destined American Indian and Alaskan Native high school graduates have completed a college preparatory curriculum. Moreover, these scholars also reveal that both ACT and SAT scores for American Indian and Alaska Natives substantially lag behind the scores of all college-bound high school students (Pavel et al. 1998).

In a qualitative study involving 22 Navajo students, Jackson and Smith (2001) found that their research participants’ concern over inadequate academic preparation...
for college was a major issue. It is significant that all the individuals in their sample attended a reservation high school. Jackson and Smith observe:

Participants reported a dramatic shift between learning environments of high school and college. . . . Many participants were surprised by the difficulty of college after having performed well in high school. Those with confidence to overcome the deficit saw themselves as exceptional. The most confused students were those who saw themselves as honor students in high school and then had to take remedial courses in college. (2001, 36-38)

Financial Difficulties

Researchers widely agree that financial difficulties represent a formidable barrier for many American Indian college students (Lunneborg and Lunneborg 1985; Sanchez et al. 1998; Thomason 1999). Mary McAfee (2000) found that financial stress was a critical factor in the decision to stay or leave school for a sample of American Indian college students. Individuals in her study specifically identified difficulties with the administration of financial aid as a major contributing reason in the decision to leave college.

Jackson and Smith (2001) also found tremendous stress caused by financial difficulties among the 22 Navajo students in their study. In fact, these researchers argue that, along with family support, family problems, and academic difficulties, financial difficulties was one of the strongest factors associated with persistence in higher education for their sample.

In a study comparing American Indians who remained in college to those who had left college before the completion of a degree, Falk and Aitken (1984) reported that both groups identified inadequate financial support as the major barrier to remaining in college. Indeed, 85% of the students who had left college before graduation identified financial problems as the major reason for their departure. Additionally, 67% of those who remained in college cited financial difficulties as the major threat to their educational persistence.

These studies reveal the vexing problem created by financial difficulties in the persistence of higher education for Native students. Indeed, given the fact that American Indians are one of the poorest groups in the United States, it would be surprising if financial difficulties were not a serious barrier to higher educational persistence (Beale 2003).

Reservation vs. Nonreservation Background

There is a growing appreciation for the relationship between the personal background of Native students and the manner in which they experience higher education (Lin 1990; Benjamin et al. 1993; Van Hamme 1996). In particular, Vincent Tinto's model (1975, 1987, 1988) of the relationship between the personal background of students and their assessment of the college experience has been widely examined and applied to minority students (Loo and Rolison 1986; Nora 1987).

Tinto argues that the way in which a student perceives, experiences, and ultimately assesses his or her time at college is shaped in large part by a collection of personal background factors. Specifically, Tinto asserts the student's home community itself is especially important in influencing the perception of the college experience. Moreover, he suggests that the shift in communities is particularly difficult for minority students. That is, he implies that because routine life in minority communities is often different from the values and norms incorporated in the mainstream structure of campus life, these differences necessarily make the transition to college more difficult. As a result, personal assessments of the college experience are directly impacted (Tierney 1992; Huffman 2003).

In an examination of the Tinto model, Taylor (2005) found there are important differences in the assessments of the college experience among Native women who had completed a terminal degree at the graduate level. Taylor concludes that while the Tinto model provides a generally adequate way to understand the academic experiences of the women in her sample, the framework is seriously flawed as an explanation for some of the most important findings in her study. Specifically, Tinto's model would suggest that individuals who are older and come from more traditional community backgrounds should have the most difficulty in dealing with the demands of higher education. Yet she reports that it is exactly these individuals who overcame the stresses of moving in and out of various communities and were ultimately successful largely due to the fact that they were older and more traditional.

Disposition toward Education

Historically, the federal government, in the attempt to strip away Native cultures, evolved an educational system for American Indian children that included day schools and boarding schools operated by the Bureau of Indian Affairs and church missions. Often these schools relied on extreme measures to eradicate Native culture from the
lives of American Indian children (Szass 1998; Reyhner and Eder 2004). As American Indian political and community power increased, the outrageous educational abuses ceased (Nagel 1996; Wilkinson 2005). However, these assimilationist efforts have left in their wake a fragmented and inconsistent educational system. The unfortunate result has been an inferior education for American Indian children, which has left them disadvantaged to compete at the higher educational level (Van Hamme 1996).

Years of fragmented and culturally hostile education also took a toll on the disposition toward education among many Native people (Deloria 1991; Littlebear 1992; Child 1996). Over the years many culturally traditional people came to see education as either irrelevant to their future or even harmful to Native culture (Red Horse 1980; Philips 1983). Ultimately, this ambivalent posture was expressed in what appeared to cultural outsiders as a noncommittal disposition toward education among many American Indians (Ward 1995; Deyhle and Swisher 1997).

In a national study on attitudes toward education held by American Indian parents and community members, Carol Robinson-Zanartu and Juana Majel-Dixon (1996) reported on the complicated nature of dispositions toward education held by reservation people. In their study involving 243 American Indian parents and community leaders representing 55 tribes and bands, these researchers found that support for education was linked to cultural responsiveness among educators. Both parents and community members displayed strong support for tribally controlled schools. Moreover, this support was associated with the cultural awareness expressed by the educational system. This finding demonstrates that many Native parents qualify the value they give education with the desire that their children experience culturally respectful schooling.

American Indian students’ attitude toward education has also been the subject of much scholarly discussion (Huffman 1999). Much the same as with parental attitudes toward education, the dispositions among American Indian students are equally as complex and linked to other important considerations (Schiller and Gaseoma 1993; Garrett 1996). For instance, in a study involving American Indian high school dropouts in Montana, Coladarci (1983) reported one of the most salient factors in the decision to leave school was dissatisfaction with the treatment and respect shown Native cultures in the school system. The implications make this an especially important finding. As Coladarci observes: “Adolescents who tenaciously identify with a particular culture can easily become dissatisfied with a local institution that appears oblivious or, worse, insensitive to their identity” (1983, 20). It is not difficult to see how such a conclusion could also be extended to the educational experiences of American Indian college students.

Cultural Traditionalism

One of the current themes in the American Indian education literature is the role played by cultural traditionalism in the academic experiences of Native students. A growing body of evidence documents that those students who hold a strong sense of their cultural identity as traditional people also perform well academically (Barnhardt 1991; Davis 1992; HeavyRunner and Morris 1997; McAfee 2000; Demmert 2001; Taylor 2005).

Robert Vadas (1995) reported that identification with Native language, culture, and traditions was related to a variety of positive educational outcomes among a sample of Navajo middle and high school students. Most specifically, Vadas concludes that a strong sense of cultural identity among the students promotes a stronger sense of self-esteem and purpose.

Whitbeck et al. (2001) also examined factors influencing educational success among 196 fifth- through eighth-grade American Indian students from three reservations in the upper Great Plains. Similar to Vadas, these researchers found that identification with traditional culture was associated with positive academic performance among the students in their sample.

Comparable findings have been reported in regard to American Indian college students. Schiller and Gaseoma (1993) found that identification with Native culture and traditions facilitated greater academic involvement and success in college. Noteworthy in the Schiller and Gaseoma study is that the majority of the students reported serious cultural conflict during their higher educational experiences.

Huffman et al. (1986) also documented the importance of strong identification with American Indian culture in assisting a sample of Lakota students through college. In this research, the projection of an American Indian identity was particularly prominent among the academically successful students in their study.

METHODS

We report in this paper the partial findings from a five-year study that examined the attitudes, perceptions, and experiences of a sample of American Indian students attending a predominantly non-Indian midwestern university. While the research was conducted, a total of 232
American Indian students enrolled in the university and all were sent a copy of the survey instrument, an explanation of the nature and purpose of the research effort, and a request for participation in the project. Ultimately, 101 surveys were returned, constituting a 44% response rate. Because mail surveys are self-administered, they have a notoriously low response rate (Dillman 1978). The 44% response rate, while low, is not atypical of these types of survey administration strategies (Kviz 1977; Kalton 1983; Spaeth 1992). Nevertheless, with such low response rates, researchers must be cognizant of potential sample bias and limitations for statistical analysis (Nardi 2006). Of the 101 completed questionnaires, 37 from upperclassmen were used in the analysis for this paper.

Upperclassmen were selected out of the total sample because this part of the research explores the specific evaluation of students who have persisted at the university. Personal assessments of underclassmen are certainly important, but by examining evaluations done by students who have remained at the university beyond the first two years, the authors are able to highlight some of the factors related to the positive and negative critiques of their time in college.

The majority of the American Indian students attending this university were Dakota, Nakota, or Lakota. Among the 37 upperclassmen, five were from other groups: four individuals were Ojibwa and one individual was Shoshone.

**Dependent and Independent Variables**

Two specific personal assessments among American Indian upperclassmen serve as the major dependent variables for this research: (1) an evaluation of the impact of college on a personal appreciation of Native American heritage (NAH), and (2) the level of satisfaction with college experience (LSC). Both of these dependent variables were measured by using single-item Likert-scale questions. An evaluation of the impact of college on personal appreciation of Native American heritage was measured by the response to the question:

*Overall, I feel that my experiences in college have caused me to appreciate and value my American Indian heritage.*

A. Strongly agree
B. Agree
C. Disagree
D. Strongly disagree

The dependent variable level of satisfaction with college was similarly measured by the response to the question:

*Overall, how would you rate your college experience?*

A. Very satisfactory
B. Satisfactory
C. Unsatisfactory
D. Very unsatisfactory

Based on the issues identified in the American Indian education literature, six independent variables are examined in relation with the personal assessment of college experience. These six independent variables are (1) reservation or nonreservation background (RES), (2) cultural traditionalism (CTR), (3) cultural conflict (CLC), (4) disposition toward college (DPC), (5) academic difficulties (ACD), and (6) financial difficulties (FID). Two additional independent variables, age (AGE) and gender (GEN), were included for analysis as a way to explore for important relationships between variables.

The variables cultural traditionalism, cultural conflict, disposition toward college, academic difficulties, and financial difficulties were measured through the construction of scales (Table 1). Specifically, these measures were scored such that lower scores indicated lower levels for each variable (See Tables 2, 3, and 4). For instance, a lower score on the cultural traditionalism scale indicated a lesser degree of cultural traditionalism. Age was measured using the scoring scheme 1 = younger than 20 years; 2 = 21 to 29 years; 3 = 30 years and older. The variable gender was scored such that male = 0 and female = 1.

Each of the scales was subjected to tests of reliability using Cronbach’s Coefficient Alpha. Generally the scales performed well under tests of reliability (cultural traditionalism = .600; academic difficulties = .802; and financial difficulties = .785). However, the scales cultural conflict and disposition toward college yielded somewhat low, although still acceptable, reliabilities (cultural conflict = .574; disposition toward college .570).

**Statistical Procedures**

Statistical analysis of the data consisted of Pearson correlations and t-tests. Pearson correlations provide a way for exploring the general relationships between variables. *T*-tests were used to compare any differences between men and women as well as differences between those from a reservation background vs. those with no reservation background.
TABLE 1
SCALES AND RELIABILITY COEFFICIENTS

<table>
<thead>
<tr>
<th>Cultural traditionalism scale</th>
<th>Cronbach’s alpha coefficient = .600</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge of Native American language</td>
<td></td>
</tr>
<tr>
<td>2. Participation in Native American ceremonies</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cultural conflict scale</th>
<th>Cronbach’s alpha coefficient = .574</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-reported cultural conflict while in college</td>
<td></td>
</tr>
<tr>
<td>2. Perception that college is designed to promote assimilation</td>
<td></td>
</tr>
<tr>
<td>3. Perception that being in college will cause a person to lose his/her “Indianness”</td>
<td></td>
</tr>
<tr>
<td>4. Feel isolated from other Native Americans while in college</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disposition toward college scale</th>
<th>Cronbach’s alpha coefficient = .570</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. College courses are interesting</td>
<td></td>
</tr>
<tr>
<td>2. College courses are relevant to the future</td>
<td></td>
</tr>
<tr>
<td>3. College offers valuable knowledge</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic difficulties scale</th>
<th>Cronbach’s alpha coefficient = .802</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inadequate academic preparation for college</td>
<td></td>
</tr>
<tr>
<td>2. Poor study skills</td>
<td></td>
</tr>
<tr>
<td>3. Poor time management</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial difficulties scale</th>
<th>Cronbach’s alpha coefficient = .785</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. College financial aid</td>
<td></td>
</tr>
<tr>
<td>2. Tribal higher education aid</td>
<td></td>
</tr>
<tr>
<td>3. Budgeting finances</td>
<td></td>
</tr>
<tr>
<td>4. Meeting expenses</td>
<td></td>
</tr>
</tbody>
</table>

Ethical Considerations

This study was initiated at the urging of the leaders of the university’s American Indian student organization. These individuals desired greater information on the nature of the higher educational experience among Native students. Additionally, this study followed the American Sociological Association’s code of ethics and all policies established by the university for research involving human subjects.

FINDINGS

The zero-order correlations are presented in Table 2. In order to perform this analysis, several variables (gender, age, and reservation background) were treated as dummy variables (see Table 2).

Notable among the zero-order correlations is the significant positive correlations between impact of college on an appreciation of Native American heritage (NAH) and cultural traditionalism (CTR) (.487, p < .01) and cultural conflict (CLC) (.610, p < .01). Additionally, the variable level of satisfaction with the college experience (LSC) is significantly correlated only with reservation background (.364, p < .05). The major dependent variables impact of college on an appreciation of Native American heritage and level of satisfaction with the college experience are not significantly correlated with each other (.139).

Moreover, review of the zero-order correlations reveals other important relationships. For instance, age (AGE) is significantly correlated to higher levels of cultural conflict (CLC) (.458, p < .01) as well as academic difficulties (ACD) (.330, p < .05). Coming from a reservation (RES) is positively correlated with cultural conflict (CLC) (.391, p < .05). Additionally, cultural traditionalism (CTR) is positively correlated with cultural conflict (CLC) (.337, p < .05) and academic difficulties (ACD) (.413, p < .01). Finally, the experience of academic difficulties (ACD) is significantly correlated with financial difficulties (FID) (.369, p < .05).

The zero-order correlations suggest a certain pattern in the college experiences for this sample of American Indian upperclassmen. Namely, these data reveal that variables indicating closer alignment with American Indian traditionalism (a reservation background and cultural traditionalism) are related to greater levels of cultural conflict while in college. However, a reservation background is also positively correlated with greater general satisfaction with the college experience (.364, p < .05), while cultural traditionalism is positively correlated with a greater likelihood that being in college imparts a greater appreciation of one’s Native heritage (.487, p < .01).

The analysis of the t-tests reveals that there are few important differences in the experiences and perceptions between the men and women included in this particular sample (Table 3). Specifically, there is no difference between the men and women in their evaluation of how college has impacted their appreciation of Native American heritage (t = 0.022, not significant) or in the level of satisfaction with the college experience (t = 0.142, not significant). However, one difference was revealed in the experiences of the men and women of this sample, that of financial difficulties. The results of the t-tests reveal that the women involved in this study reported significantly higher levels of financial difficulties compared to the men.

The t-test results comparing those with a reservation background to those with no reservation background revealed two significant differences (Table 4). First, those students from reservations reported higher levels of cultural conflict while in college compared to those not from...
### TABLE 2
ZERO-ORDER CORRELATIONS

<table>
<thead>
<tr>
<th></th>
<th>GEN</th>
<th>AGE</th>
<th>RES</th>
<th>CTR</th>
<th>CLC</th>
<th>DPC</th>
<th>ACD</th>
<th>FID</th>
<th>NAH</th>
<th>LSC</th>
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</thead>
<tbody>
<tr>
<td>AGE</td>
<td>.512**</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>RES</td>
<td>.358*</td>
<td>.414**</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>CTR</td>
<td>.267</td>
<td>.458**</td>
<td>.190</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>CLC</td>
<td>.199</td>
<td>.368*</td>
<td>.391*</td>
<td>.337*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>DPC</td>
<td>.195</td>
<td>.075</td>
<td>.163</td>
<td>.186</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ACD</td>
<td>.045</td>
<td>.330*</td>
<td>.250</td>
<td>.413**</td>
<td>.241</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FID</td>
<td>.276</td>
<td>.069</td>
<td>.071</td>
<td>.201</td>
<td>.262</td>
<td>.053</td>
<td>.376*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>NAH</td>
<td>-.004</td>
<td>.139</td>
<td>.187</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.487**</td>
<td>.610**</td>
</tr>
<tr>
<td>LSC</td>
<td>.024</td>
<td>-.081</td>
<td>.364*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01

Note: GEN = Gender (male = 0; female = 1), AGE = Age (younger than 20 = 1; 21-29 = 2; 30 or older = 3), RES = Reservation Background (nonreservation = 0; reservation = 1), CTR = Cultural Traditionalism (lower scores = less degree of cultural traditionalism), CLC = Cultural Conflict while in College (lower scores = less cultural conflict), DPC = Disposition toward College (lower scores = less favorable disposition), ACD = Academic Difficulties (lower scores = fewer difficulties), FID = Financial Difficulties (lower scores = fewer difficulties), NAH = Impact of College on Appreciation of Native American Heritage (lower scores = less impact), LSC = Level of Satisfaction with College Experience (lower scores = less satisfactory).

### TABLE 3
T-TEST DIFFERENCES BETWEEN THE GENDERS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>N</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTR</td>
<td>Male</td>
<td>4.083</td>
<td>1.379</td>
<td>12</td>
<td>1.638</td>
<td>p &lt; .05</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>5.000</td>
<td>1.683</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>CLC</td>
<td>Male</td>
<td>8.545</td>
<td>3.142</td>
<td>11</td>
<td>1.148</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9.609</td>
<td>2.190</td>
<td>23</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>DPC</td>
<td>Male</td>
<td>10.083</td>
<td>1.379</td>
<td>12</td>
<td>1.174</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10.600</td>
<td>1.90</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ACD</td>
<td>Male</td>
<td>9.917</td>
<td>2.875</td>
<td>12</td>
<td>0.267</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10.200</td>
<td>3.082</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FID</td>
<td>Male</td>
<td>11.667</td>
<td>3.798</td>
<td>12</td>
<td>1.673</td>
<td>p &lt; .10</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>14.292</td>
<td>4.713</td>
<td>24</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>NAH</td>
<td>Male</td>
<td>3.167</td>
<td>0.937</td>
<td>12</td>
<td>0.022</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.160</td>
<td>0.850</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>LSC</td>
<td>Male</td>
<td>3.167</td>
<td>0.835</td>
<td>12</td>
<td>0.142</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.200</td>
<td>0.577</td>
<td>25</td>
<td>—</td>
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</tr>
</tbody>
</table>

Note: n.s. = not significant, CTR = Cultural Traditionalism (lower scores = less traditionalism), CLC = Cultural Conflict (lower scores = less cultural conflict), DPC = Disposition toward College (lower scores = less favorable), ACD = Academic Difficulties (lower scores = fewer difficulties), FID = Financial Difficulties (lower scores = fewer difficulties), NAH = Native American Heritage (lower scores = less impact), LSC = Level of Satisfaction with College Experience (lower scores = less satisfactory).

### TABLE 4
T-TEST DIFFERENCES BETWEEN RESERVATION BACKGROUND

<table>
<thead>
<tr>
<th>Variable</th>
<th>Background</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>N</th>
<th>T-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTR</td>
<td>Nonreservation</td>
<td>4.200</td>
<td>1.549</td>
<td>10</td>
<td>1.146</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Reservation</td>
<td>4.888</td>
<td>1.649</td>
<td>27</td>
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<tr>
<td>CLC</td>
<td>Nonreservation</td>
<td>7.500</td>
<td>2.138</td>
<td>8</td>
<td>2.406</td>
<td>p &lt; .05</td>
</tr>
<tr>
<td></td>
<td>Reservation</td>
<td>9.808</td>
<td>2.433</td>
<td>26</td>
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<td>—</td>
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<tr>
<td>DPC</td>
<td>Nonreservation</td>
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<td>1.101</td>
<td>10</td>
<td>0.977</td>
<td>n.s.</td>
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<tr>
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<td>Reservation</td>
<td>10.556</td>
<td>1.311</td>
<td>27</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>ACD</td>
<td>Nonreservation</td>
<td>8.900</td>
<td>3.071</td>
<td>10</td>
<td>0.135</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Reservation</td>
<td>10.556</td>
<td>2.873</td>
<td>27</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FID</td>
<td>Nonreservation</td>
<td>12.900</td>
<td>3.604</td>
<td>8</td>
<td>0.417</td>
<td>n.s.</td>
</tr>
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<td>Reservation</td>
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<td>4.916</td>
<td>24</td>
<td>—</td>
<td>—</td>
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<tr>
<td>NAH</td>
<td>Nonreservation</td>
<td>2.900</td>
<td>0.994</td>
<td>10</td>
<td>1.124</td>
<td>n.s.</td>
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<tr>
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<td>Reservation</td>
<td>3.259</td>
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<td>27</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>LSC</td>
<td>Nonreservation</td>
<td>2.800</td>
<td>0.789</td>
<td>10</td>
<td>2.311</td>
<td>p &lt; .05</td>
</tr>
<tr>
<td></td>
<td>Reservation</td>
<td>3.333</td>
<td>0.555</td>
<td>27</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: n.s. = not significant, CTR = Cultural Traditionalism (lower scores = less traditionalism), CLC = Cultural Conflict (lower scores = less cultural conflict), DPC = Disposition toward College (lower scores = less favorable), ACD = Academic Difficulties (lower scores = fewer difficulties), FID = Financial Difficulties (lower scores = fewer difficulties), NAH = Native American Heritage (lower scores = less impact), LSC = Level of Satisfaction with College Experience (lower scores = less satisfactory).
reservations ($t = 1.146, p < .05$). Second, however, those students from reservations also related higher levels of satisfaction with the college experience compared to those not from reservations ($t = 2.311, p < .05$).

**DISCUSSION**

Our findings suggest that the impact of the college experience on an appreciation of Native American heritage and the general level of satisfaction with college are influenced by several important factors. While this study offers no evidence that men and women are significantly different in their general level of satisfaction or in the way they assess the impact of college on an appreciation of American Indian heritage, it does suggest that there are differences between those with reservation backgrounds and those with no reservation backgrounds.

As stated above, both zero-order correlations and $t$-test analysis revealed that students from reservations evaluated their college experiences higher than those who were not from reservations, and at the same time, those from reservations experienced significantly higher levels of cultural conflict. The latter finding is not surprising. It might be reasonably expected that those from reservations, where American Indian cultural traditionalism is more prevalent, would experience greater levels of cultural conflict while in college (Davis 1992; Garrett 1996; Huffman 2003). Yet our research also found that those from reservations related higher levels of satisfaction with the college experience compared to those who were not from reservations.

These findings indicate that those students from the more culturally traditional background of the reservation likely wrestle with greater cultural conflict in college compared to those not from reservations who could reasonably be expected to be less exposed to American Indian cultural traditionalism. However, it may also be possible that these more culturally traditional students take from their college experience a greater appreciation for their American Indian heritage (Garrett 1996; Glatzmaier et al. 2000). That is, the cultural conflicts they face may also lead them to a greater appreciation for their cultural heritage, and as a result of persisting in their educational pursuits, they are led as upperclassmen to evaluate their academic experiences more positively.

Indeed, as discussed above, there is a growing body of evidence that those students who embrace American Indian cultural traditionalism are also especially well suited to compete and succeed in the higher educational arena. In a qualitative study on the personal experiences of 69 American Indian college students, Huffman (1999) found that culturally traditional students used their strong sense of ethnicity to form a firm social-psychological anchor. Moreover, these individuals also reported frequent experiences with cultural conflict, which they were better able to manage as they derived confidence from their ethnic identity and heritage. As a result, they were eventually able to succeed in the mainstream academic setting.

Clearly, this is an aspect of the American Indian college experience deserving of greater scholarly investigation. Qualitative research designs would likely reveal in rich detail the important similarities and differences between those with reservation backgrounds and those without, in the ways they evaluate their college experiences as well as perceive the difficulties posed by cultural conflict and other potential barriers to educational achievement.

Although it was not the specific focus of this study, we discovered an important difference in the college experience between the men and women in this sample. Specifically, the women reported significantly higher levels of financial difficulties compared to the men. This is, of course, an important finding, as financial strain on college students fundamentally impacts their entire academic experience (Jackson and Smith 2001).

Moreover, few researchers have examined the educational experiences of American Indian women (Bowker 1993). In one of the few studies on the subject, Taylor (2005) found that financial burdens were the most frequently cited barrier to educational persistence among a sample of 31 individuals who had completed terminal degree programs. Thus, there are intersecting needs for research on gender and race and higher education. The unique needs and perspectives of American Indian women in their higher educational experiences (including financial pressures) would yield potentially useful information.

**CONCLUSION**

Understanding personal experiences with institutions, such as an institution of higher education, is a complex undertaking, even more so when they are the personal experiences of American Indian students enrolled in predominantly non-Indian campuses.

We have much to learn about the way American Indian students encounter and ultimately evaluate academia. Given the highly personal and fluid nature of these experiences, long-term, qualitative research designs would be especially helpful in the exploration of this phenomenon. Ultimately, greater understanding of how American Indian students personally experience and assess college
would be tremendously helpful in identifying the factors in and interpreting the patterns of both attrition and persistence among Native students.

REFERENCES


