Native American students' perceptions of counselor effectiveness at Montana State University by Verla Vester Dynneson

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education Montana State University
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Abstract:
The purpose of this research was to determine if Native American students' perceptions of counselors' effectiveness was affected by the sex, blood quantum, tribe, or reservation background of the student or by the sex, ethnicity, or place of work of the counselor. A stratified random sample of 60 Native American students at Montana State University was selected to rate the effectiveness of counselors and to indicate willingness to see the counselors. By random groups, the students rated slide/audiotape counseling sessions of a counselor and a student engaged in a counseling session about the student's academic and personal concerns. Each group rated a counselor in one of six different conditions, varying the student and counselor characteristics listed above, according to Atkinson's Counselor Effectiveness Rating Scale dimensions of expertness, attractiveness, and trustworthiness. Students also indicated if they were willing to see the counselor they rated. The results of the ratings and biographical data obtained on each student were analyzed by two-way analyses of variance and chi square tests of independence to determine if significant effects were produced by any of the variables.

In every variable pairing, Native American students expressed a preference for Native American counselors over non-Native American counselors. Native American students considered the counselor associated with the Native American center to be more expert than the one with the counseling center when place of work was paired with sex of student and place of work with reservation background. Students with high or low blood quantum considered Native American counselors more trustworthy than students of medium blood quantum did; however, all students' ratings of counselor trustworthiness were positively affected by the Native American ethnicity of the counselor, high and low blood quantum students more so. Students considered counselors associated with a Native American center to be more expert than those associated with the counseling center. Sex of student exerted no influence on any ratings under any conditions, and no effects were produced by tribe of student in any pairings.
NATIVE AMERICAN STUDENTS' PERCEPTIONS
OF COUNSELOR EFFECTIVENESS AT
MONTANA STATE UNIVERSITY

by

Verla Vester Dynneson

A thesis submitted in partial fulfillment
of the requirements for the degree
of
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MONTANA STATE UNIVERSITY
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September 1983
APPROVAL

of a thesis submitted by

Verla Vester Dynneson

This thesis has been read by each member of the thesis committee, has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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Date

Co-chairperson, Graduate Committee

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Head, Major Department

Approved for the College of Graduate Studies

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Date

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ABSTRACT

The purpose of this research was to determine if Native American students' perceptions of counselors' effectiveness was affected by the sex, blood quantum, tribe, or reservation background of the student or by the sex, ethnicity, or place of work of the counselor. A stratified random sample of 60 Native American students at Montana State University was selected to rate the effectiveness of counselors and to indicate willingness to see the counselors. By random groups, the students rated slide/audiotape counseling sessions of a counselor and a student engaged in a counseling session about the student's academic and personal concerns. Each group rated a counselor in one of six different conditions, varying the student and counselor characteristics listed above, according to Atkinson's Counselor Effectiveness Rating Scale dimensions of expertness, attractiveness, and trustworthiness. Students also indicated if they were willing to see the counselor they rated. The results of the ratings and biographical data obtained on each student were analyzed by two-way analyses of variance and chi square tests of independence to determine if significant effects were produced by any of the variables.

In every variable pairing, Native American students expressed a preference for Native American counselors over non-Native American counselors. Native American students considered the counselor associated with the Native American center to be more expert than the one with the counseling center when place of work was paired with sex of student and place of work with reservation background. Students with high or low blood quantum considered Native American counselors more trustworthy than students of medium blood quantum did; however, all students' ratings of counselor trustworthiness were positively affected by the Native American ethnicity of the counselor, high and low blood quantum students more so. Students considered counselors associated with a Native American center to be more expert than those associated with the counseling center. Sex of student exerted no influence on any ratings under any conditions, and no effects were produced by tribe of student in any pairings.
CHAPTER I

INTRODUCTION

Over two hundred years ago, the white man's ability to educate Indian youth was evaluated in a communication delivered by the Indian chiefs of the Six Nations to the Commissioners of Virginia. The occasion was the return of the youth to their tribes after the Commissioners had bestowed upon the young Indians a "civilizing education."

Several of our young people were formerly brought up at the colleges of the Northern Provinces; they were instructed in all your science, but when they came back to us, they were bad runners; ignorant of every means of living in the woods; unable to bear either cold or hunger; knew neither of how to build a cabin, take a deer, or kill an enemy; spoke our language imperfectly; were therefore neither fit for hunters, warriors, or counselors; they were totally good for nothing (Benjamin Franklin cited in Otis, 1972).

The Indian people found that the next two centuries of "civilizing education" gave them little opportunity to experience much other than disappointment and disillusionment. The displacement of Indians and loss of self-respect that resulted from white education policies became a continuing and present problem.
HISTORICAL BACKGROUND OF INDIAN EDUCATION

This country's early attempts to educate the Indians were mainly to convince them to abandon their own religions for Christianity; education was conducted through missions by religious groups such as the Jesuits and the Franciscans. Later, the colonists came to believe that formal education would be the most effective method of converting the Indians to European Christian ways; consequently, they wrote charters for their universities that startle people today, charters which clearly espoused the goals of Dartmouth, for example, as the education of Indian and English youth equally or, as in the case of Harvard, the education of Indian youth primarily. After the Civil War this country sustained a period of humanitarian reform, recognized "the deplorable state of the Indian" (Berry, 1972), and intended to rectify that deplorable condition by providing off-reservation boarding schools for Indian education. The government's off-reservation boarding school policy, which simply removed Indian children from their homes and placed them under the total control of the Federal government, became the most common way of educating Indian children. (The boarding school approach was to separate children from their families at five or six years of age, to apply strict military discipline within the school, and to utilize a strong program of work and study that emphasized industrial
The off-reservation boarding school dominated Indian education until the mid-1900's. In fact, twelve such schools were still in operation as recently as 1972. The effects of the whites' attempts to educate Indian children may be more easily understood once it is realized that white schools and schooling succeeded in displacing native educational processes, processes that had reinforced the individual's cultural identity, but offered little to replace self-esteem in the context of the new value system. Before Europeans arrived in America, Native Americans already possessed an unstructured educational process of their own, one which enculturated children with the particular tribe's values and techniques for survival, the kind outlined by the chiefs of the Six Nations. The early European church-oriented education imposed upon Indian children conflicted severely with actual educational needs as they existed for the Indian people at that time. Otis (1972) proposes that this conflict had a far reaching effect which still influences Indian education.

In this conflict there exists the roots of the relationship which exists today between Indians and Indian education—the Indian's fear of losing his cultural identity if he receives a white man's education (p. 68).

Whether or not the Indians' fears were well-grounded, the outcome of this conflict was nothing less than white America's failure to provide adequate education for an entire minority group of American people. A
two-century-long attempt by the American government to provide for the educational needs of the Indian people was summarized harshly by Senator Robert F. Kennedy, Chairman of the Senate Special Subcommittee on Indian Education. Senator Kennedy's damning description of Indian education, in part, follows:

... the question then arises, how well have we met our obligation (to educate Indian children)? The few statistics we have available are the most eloquent evidence of our own failure:
- Dropout rates are twice the national average;
- The level of formal education is half the national average;
- Achievement levels are far below those of their white counterparts;
- The Indian child falls progressively farther behind the longer he stays in school.
- Indian children, more than any other group, believe themselves to be "below average" in intelligence. ... Indian children in the 12th grade have the poorest self-concept of all minority groups tested. The children often abandon their own pride and their own purpose and leave school to confront a society in which they have been offered neither a place nor a hope (1972).

Statistics confirm that Indian students who were educated in the United States prior to 1970 did not receive an education comparable to that of the rest of the American citizenry. As of 1970, ten percent of all Indian children were simply not enrolled in school; a large number, fifty percent, had dropped out of school before completing their high school education; and those who did receive a high school diploma were approximately four years behind the national average in achievement at the completion of high school (Bahr, 1972). Berry (1972) indicts the American
The American educational system's misguided attempts to educate Indian children:

... Schools have failed Indian children, parents and communities. Their intellectual, emotional and social development has been so grossly neglected; so little attention is devoted to the development of their cognitive and affective skills that Indian children do not become proficient even at an elementary level. ... The high incidence of psychological and emotional problems reflected in drop-out and suicide rates provides convincing and alarming evidence of the seriousness of the failure of the American educational system to provide an educational program appropriate for the majority of Indian people (p. 88).

At the conclusion of the Senate special subcommittee hearings, improving Indian education was set as the nation's first educational priority for the future. As a result, the Indian Education Act was passed in 1972, establishing the National Advisory Council on Indian Education (NACIE) to assist the Office of Education in matters regarding Indian Education (NACIE, 1975). Awareness among Indians of the value of education as a means to acquire power and as a way to maintain Indian culture increased. Among Indians, education is the route to self-determination, and self-determination will allow the survival of Indian culture (Whiteman, 1978). "No Indian today will deny that the Indian people need knowledge and skills from the non-Indian world in order to survive. Acquisition of this knowledge and these skills is through the school system" (Bryde, 1971).

Indian and non-Indian educators recognized that the
The most effective approach to a useful and equitable education probably consisted of attempting to maintain Indian culture and Indian society and at the same time of preparing Indians to adapt to and make use of the non-Indian culture that exists in America as well. One of the new emphases that emerged from this attention to Indian education in the early seventies has been a focus on college and university education for Indians and the establishment of college-level Native American Studies programs and/or Native American centers designed particularly to provide for the needs of Indian students. Whiteman notes the need for Native American Studies programs to provide assistance in academic, financial, and personal matters to help college students adjust to university life: making the transition, combatting the attrition rate, and dealing with other stresses (1978).

Through centuries of racism and discrimination, real harm has been done to the Indian people, and, consequently, this society needs to do all in its power to ensure the success of Indians in higher education so that they have the means to continue or to develop a lifestyle that can effectively provide for their needs while at the same time allowing them to benefit from white culture.
INDIANS IN HIGHER EDUCATION

College Attrition

According to 1975 statistics, only 17% of high school graduates who are Indian enroll in colleges or universities, as compared to 38% of the general population of high school graduates (NACIE, 1975). Not only do colleges attract proportionately fewer Indian students, they also retain fewer. Although not completing a degree certainly cannot be assumed to be a negative outcome for all students, the attrition rate for Native American students can easily be recognized as excessive. Indian educator Arthur McDonald believes that white universities are geared to understanding neither the complexity of Indians nor the difficulty of their adjustment to another society. As a result of the insensitivity found in white institutions, he notes that college dropout rates for Indian students are alarmingly high, ranging, according to various estimates, from 79% to 95% (1978).

Difficulties Indian Students Encounter

By interviewing Indian students who had attended college and had dropped out, McDonald (1978) determined that they frequently mentioned five reasons for their difficulty in college:

(1) the nature and quality of previous education,
(2) lack of personal finances,
(3) institutional racism, coupled with the experience
of personal discrimination,

(4) the lack of persuasive role models available to students, and

(5) cultural differences between the student and the institution which create a value conflict for the student (p. 74).

In addition to these problems which are experienced uniquely by Indian students, the problems of adjusting to college life and finding one needs to learn about a totally new environment, problems for Indian and non-Indian students alike, are present.

Inadequate previous education. The first of these reasons for dropping out of college, the nature and quality of previous education, was, McDonald emphasizes, almost unanimously indicated by students he interviewed. All believed they had been inadequately prepared to compete with other college students. They noticed that the college environment was completely different from anything they had experienced in high school, in contrast to the opinion of their white brothers and sisters that, academically, college was generally just an extension of what they had become accustomed to in high school.

Lack of finances. The other four reasons for difficulty in college were not given unanimously by dropout students, as the first reason was, but were mentioned frequently. Students believed that even with financial
aid, tribal monies, and government scholarships, each source's contribution was too often dependent upon the amount received from other sources, and consequently students found they needed to work fifteen or twenty hours a week to earn money for clothes, transportation, and incidental expenses. These extra hours of work, added to large amounts of studying time to make up for the fact that their previous education had been inadequate, often overwhelmed students.

Discrimination. Institutional racism or the experience of discrimination was another reason students gave for dropping out. Racism, according to McDonald, appeared subtly but insidiously in university policies and programs which failed to recognize any special needs of the Indian student. Discrimination sometimes took the form of not treating students differentially. Indian students thought their special circumstances were often not given consideration. Adding to this problem was the tendency for the institution to assume all Indians are alike, when in fact actual differences among tribes may be great.

Lack of role models. Students reported dropping out because they failed to see the value of a college education. Lacking successful college graduate role models, especially successful graduates who return to the reservation and are therefore visible, Indian children have a difficult time seeing the usefulness of a college
education to themselves. Indian college students also found it unlikely that they would encounter Indian role models in positions of status on college campuses and believed this factor also supported their belief that little could be gained from a college education.

**Values conflict.** Of particular importance as a reason for Indian students dropping out of college was the difference in value systems between the two cultures, especially with regard to the concept of time. McDonald notes that the reservation culture treats time as a relative concept: The immediate task is more important than the future task. Clock-watching and compunctuality are difficult for the Indian student to learn. Indian values do not include the concepts of sacrificing and training for a future end; thus, Indian values obviously conflict with institutional educational values which place heavy emphasis on present effort and self-denial for a future goal.

Another value conflict which has a tremendous impact on the Indian student's college performance is the Indian's sense of responsibility to and consideration for his or her family, a family which is a large, extended family rather than the nuclear family familiar to most white people. In times of need, Indian children feel they are obligated to grandparents, aunts, uncles, and cousins as well as to parents and siblings. McDonald describes the hardship
these conflicting values create for Indian students.

It is often difficult for people living in an academic environment to understand the tremendous sense of responsibility a student may have towards apparently distant relatives. In Indian culture, if one is asked to help, he simply cannot refuse. Thus, a student who receives a phone call telling him he is needed at home will go. The threat of receiving an "F" in a course is of little relative importance. If he is needed, he is needed. The fact that administrative officials do not understand what is real and true to the Indian community is very bewildering to the Indian student (p. 83).

McMahon (1973) notes that value differences between the Indian and white cultures, particularly those white values promoted in educational settings which directly conflict with Indian values, generate stresses that are often manifested in scholastic failure and problems of personal adjustment.

Adjustment to college life. All college students, minority or not, find themselves subjected to new academic procedures, they find themselves responsible for their own learning to a much greater extent than ever before, and they find the quality and quantity of information they are expected to know greatly increased over high school expectations of them. Academic pressures are not the only pressures encountered, however. At the time they enter college, or shortly thereafter, students are expected to make some vocational decisions that they may live with for the rest of their lives. Then too most college students find themselves, for the first time, totally in control of
their social lives, with the weight of the responsibility for themselves and their personal-social needs adding to the already heavy burden of responsibility in academic and vocational matters. Needless to say, college represents a time of substantial adjustment for all new college students.

Alien environment. Not all pressure upon students is negative by any means, but pressure becomes a serious problem when students see more demands upon them, from various sources, than they feel capable of meeting. Bevan (1965) explains that students who come to the university unaware that the values of the system will be different from their own, who come without adequate preparation for the academic demands, who are unaware of the university's goals and standards of performance, who have not clearly determined what their own goals at the university are, and who are unprepared for a strange and often impersonal milieu without the support of a primary group are the ones who will suffer the most. Although speaking of the general student population, Bevan has made statements extraordinarily descriptive of the situation of Indian college students.

All considered, Indian students bear the handicaps of inadequate education before coming to college, limited personal finances and limited time to work for extra money, needing to cope with institutional racism and
discrimination, a lack of persuasive role models, and major cultural differences to which they are expected to adjust as well as those academic, vocational, and personal concerns common to all students. To aid students in resolving their problems in these areas, colleges and universities, as a part of the broad area of student personnel services, offer help for students through the college counseling center. Trained professionals are available to counsel students who have concerns they are unable to resolve themselves. Gallagher and Demos (1970) define the counseling center as "the major agency for assisting students with a variety of problems" (p. 12).

Counseling to Support Higher Education

One of the most recurring needs expressed by the Indian dropout students in the survey by McDonald was for more adequate counseling throughout their entire academic careers. Students believed that counseling may have given them much-needed assistance. For the students in his survey, McDonald suggests that supportive counseling could have meant the difference between remaining in school and dropping out. Counseling is an important way to help Indian students resolve those problems previously discussed: sorting out value conflicts, making vocational decisions, coping with racism and discrimination, and adjusting to an unfamiliar environment (Bryde, 1971; McDonald, 1978; and Whiteman, 1978). A NACIE (1975) survey
described in the Report of Progress for the First Year Program of the Indian Education Act of 1972 found educators overwhelmingly agreed that more extensive counseling services were needed to help improve Indian students' self-concept and to aid in their social adjustment as well as to assist them with academic problems.

The value of counseling to the success of an individual as a college student is demonstrated particularly in grades and graduation rates. This consideration is especially important to Indian students who have a high dropout rate (McDonald, 1978). Users of a counseling service are more likely than non-users to graduate and are also less likely to leave the university in bad standing; that is, they are more likely to experience success in college. By way of example, research with students at the University of California at Berkeley (a population which included a large number of Indian students) showed better academic achievement among students who used the college counseling center, and it showed a lower dropout rate among those students as well (Kirk, 1973). Findings of other researchers (Frank & Kirk, 1975; Gallagher & Demos, 1970; and Shepherd, 1965) have supported Kirk.

For academic and personal-social concerns both, colleges and universities with substantial Indian student populations must be prepared to recognize special needs and
to provide counseling services of a perhaps more specialized and sensitive nature for these students.

STATEMENT OF THE PROBLEM

To help establish how best to provide counseling services for Native American students, this study proposed to determine (1) if certain characteristics of the counselor are related to Native American students' perception of the counselor and the students' willingness to see the counselor and (2) if the perceptions Native American students have of counselors and their willingness to see counselors are related to demographic differences among the Native American students.

NEED FOR THE STUDY

In order to provide more adequate counseling service for Native American students, it may be necessary to do more than simply provide a counseling center. Important questions have been raised, by Indian educators as well as by researchers who have studied other minority groups, regarding the best counseling services in a university with Native American students: Considering cultural differences and special needs, should a counseling center provide a Native American counselor for those students? Or should a
Native American counselor be made available through a Native American center, thereby bypassing altogether the traditional institutional approach of basing counselors in a traditional counseling center? What variables affect the usefulness of the counselor to the student and can they be managed so that a counselor who is useful to Native American students is somehow made available to them? Furthermore, and perhaps most importantly, can we justify grouping together all Native American students, regardless of tribe or other background, to identify their special needs, or are tribal and other differences so great that we do Indians a disservice by asking questions of them or suggesting answers to them as though they were a homogeneous group?

**Variables Affecting the Success and Value of Counseling**

Important variables have been identified which affect the success and value of counseling to the client. The perceptions and preferences of students influence whether the student will go to a counselor for help and whether or not the counselor will be able to establish a relationship with the student that will be helpful. Knowing and being able to respond to the preferences Native American students have for counselors is important in providing counseling services both because the availability of a preferred counselor affects a student's willingness to come to the counselor and because extensive research has shown that the
outcome of counseling is more likely to be successful if
the counselor is what the client prefers and expects (Fry, Kropf, & Coe, 1980; Genshaft, 1982; Rosen, 1967; and Ziemelis, 1974).

How the client perceives the counselor is fundamentally important to client-centered counseling (Carkhuff, 1969; and Rogers, 1957). Research with other minority groups indicates that students' willingness to seek counseling may be related to the similarity of the student and counselor in terms of minority group membership and sex (Casciani, 1978; and Thompson & Cimbolic, 1978). Bryde (1971) notes that as a counselor deals with Indian students it is the Indian student’s perception of the counselor as a person that will determine the student's response to the counselor.

Other variables contribute less overtly to the ultimate value of counseling in that they may not actually discourage a client from coming to see a counselor initially but that are nonetheless important to the outcome of counseling. For counseling to be effective in helping to achieve the goals of a student, it is necessary that the student perceive the counselor as someone who is, first of all, competent (Atkinson & Carskaddon, 1975; Bryde, 1971; and Cimbolic, 1972). The belief or expectancy that one will receive help in itself often moves the client toward his or her goal. Perception of a counselor as competent is
therefore an important variable in successful counseling.

Another variable that is correlated with positive counseling outcomes is one sometimes called "attraction" (Boulware and Holmes, 1970). Seeing the counselor as a likable person, as someone that one can feel comfortable approaching, and as friendly rather than aloof contributes to a counseling relationship in which the client's goals can be more easily achieved, particularly for clients who are Indian students (Bryde, 1971; and LaFromboise & Dixon, 1981). Therefore, a client's perception of a counselor as attractive (but not necessarily physically attractive) is an important variable too.

Perhaps the most important variable of all to successful counseling is trust; certainly it is important if minority students are involved (Bryde, 1971; LaFromboise & Dixon, 1981; and Rogers, 1957). Trust is a more difficult condition to establish when counseling with minority groups and it is at the same time also more essential (Rotter, 1967). LaFromboise and Dixon (1981) say that "although a majority group member may encounter a relationship with an attitude of trusting the other until clear evidence that the person cannot be trusted surfaces, a member of a minority group frequently enters the relationship suspending trust..." (p. 135).

Client-centered counseling will be successful only to the extent that a client perceives he or she can deeply and
completely trust the counselor (Carkhuff, 1969; and Rogers, 1957). Particularly for Indian clients, then, perception of the counselor as an individual who can be trusted is a necessary variable.

Research concerning other minority groups' attitudes and the opinions of Indian educators suggest Native American students perceive Indian and non-Indian counselors differently in regard to these characteristics (Abbott, Tollefson, & McDermott, 1982; Barker, 1979; McDonald, 1978; Thompson & Cimbolic, 1978; and Whiteman, 1978). Indian educators also suggest that experiencing institutional racism and personal discrimination causes a Native American student to perceive counselors associated with a Native American center differently from those associated with a counseling center, which is identified by minorities as the traditional institutional help-giving service (McDonald, 1978; and Whiteman, 1978). Research which examines this particular minority group's perceptions and willingness to see a counselor is needed to establish these suppositions as true.

Some research has been conducted with Native American high school students to determine their perceptions of Indian and non-Indian counselors and their perceptions of different counseling approaches. Research at the college level regarding any of the variables discussed above is virtually non-existent.
Differences Among Indians

An important corollary issue in determining the preferences of Native American students appears in Indian educators' discussions of the assumption white society often makes that all Indians are similar, when in fact tribe-to-tribe differences may be great (McDonald, 1978; and Deloria, 1970). Whiteman discusses these tribal and reservation differences:

We know the needs of Native Americans in off-reservation areas will differ from the needs of those on reservations. We know that the needs of one tribal group will differ from those of another. The Blackfeet differ from the Salish and Kootenai just as the Navajo from the Apache, the Hoopa from the Pomo, and the Seneca from the Tuscarora" (p. 114, 1978).

NACIE (1980), in its Seventh Annual Report to the Congress of the United States, concludes that among the unmet educational needs for Indians in the 1980's are a need to recognize cultural differences among tribes and a need to recognize that Indian educational needs will vary from reservation to reservation. Research which establishes whether Indians with different tribal and other background characteristics are similar in their perception is also needed.

Differences among Indian sub-groups which have been suggested to affect perceptions of a non-Indian counselor are the percentage of Indian blood one has (blood quantum), the tribe to which one belongs and with which one identifies, the area in which one was raised (that is,
having been raised on a reservation or off a reservation) and the kind of education (public school, church school, or federal government school) that a student has received before coming to college (Voyich, 1974).

Although Montana State University's Native American population (156, autumn quarter, 1982) is slightly less than 2% of the total enrollment, 172 institutions of higher education in this nation have Native American enrollments that exceed 3% of their total enrollment, and 56 institutions have Native American enrollments greater than 5% of their total enrollment. Fourteen states have enrollments of more than 1,000 to as many as 20,000 Indian students (Department of Health, Education, and Welfare, 1976). None of the limited research conducted with Native American students' attitudes toward counseling has focused on these cultural differences but certainly the applicability of any Native American research depends upon there being a similarity in perceptions of Native Americans from various backgrounds. Knowing such a similarity existed would contribute greatly to the generalizability of research conducted with one tribe or at one locale to another. The results of this research are applicable to the development and maintenance of counseling services for Indian students in these institutions and areas. In addition, inferences from this research to the Native American population at Montana State University can be made.
to allow the counseling center and the Native American center at Montana State University to extend whatever services will be most beneficial to Native American students.

QUESTIONS TO BE ANSWERED

The issues discussed above were researched by answering the following general questions which attempted to discover if Native American college students' perceptions of Indian and non-Indian counselors differ, and, if so, how.

1. Are students' perceptions of a counselor's effectiveness affected by the counselor's ethnicity or the sex of the student?

   a. Do students perceive a Native American counselor to be as expert (competent, skillful) as a white counselor, and do male and female Native American students differ in how they perceive the expertness of each?

   b. Will students see a white counselor as being as attractive (approachable, friendly, or likable) as a Native American counselor, and will male and female students differ in this perception?

   c. Are students more likely to believe a Native American counselor is trustworthy than a white counselor, and do male and female students differ in this belief?
d. Are students as willing to see a white counselor as they are a Native American counselor, and does their willingness depend upon whether the student is male or female?

2. Are students' perceptions of a counselor's effectiveness affected by the sex of the counselor?
   a. Will students perceive a male counselor to be more expert than a female, and will this perception differ depending on the sex of the student?
   b. Are students likely to think a female counselor is more attractive (approachable, friendly, or likable) than a male counselor, and will male and female students have different perceptions of the counselor's attractiveness?
   c. Will students perceive a female counselor as being more trustworthy than a male counselor, and will male and female students differ in this perception?
   d. Are students equally willing to see a male or female counselor, and, if not, will differences depend on the sex of the student?

3. Are students' perceptions of a counselor's effectiveness affected by the counselor's place of work?
   a. Do Native American students perceive a counselor who works at a counseling center to be more expert than a counselor who works at a Native American center, and do male and female students differ in this perception?
b. Are counselors who work at a Native American center more attractive (approachable, friendly, or likable) to Native American students than counselors who work at a counseling center, and will male and female students' perceptions of the counselors' attractiveness vary?

c. Will students perceive a counselor who works at a Native American center to be more trustworthy than a counselor who works at a counseling center, and will male and female students have the same perceptions?

d. Will students be as willing to see a counselor who works in a counseling center as a counselor who works in a Native American center, and will differences depend on the sex of the students?

4. Are students' perceptions of a counselor's effectiveness affected by the blood quantum of the student?

   a. Will students with high, medium, and low blood quantum (percentage of Indian blood) differ in their perception of the expertness of Native American and white counselors?

   b. Will students with different blood quantum differ in their perceptions of the attractiveness of Native American and white counselors?

   c. Do students with different blood quantum have different perceptions of the trustworthiness of Native American and white counselors?
d. Will students with different blood quantum differ in their willingness to see Native American and white counselors, and will differences depend on the sex of the student?

5. Will students with different blood quantum have different perceptions of male and female counselors?
   a. Will students with different blood quantum have different perceptions of the expertness of male and female counselors?
   b. Will Native American students with different blood quantum have different perceptions of the attractiveness of male and female counselors?
   c. Will students with different blood quantum have different perceptions of the trustworthiness of male and female counselors?
   d. Will the willingness of students to see male or female counselors depend on the blood quantum of the student?

6. Will students with different blood quantum have different perceptions of counselors who work at counseling centers and counselors who work at Native American centers?
   a. Will students with high (as opposed to medium or low) blood quantum be more likely to perceive a counselor who works at a Native American center as being more expert than a counselor who works at a counseling
center?

b. Are students with high blood quantum more likely than students with low blood quantum to consider a counselor who works at a Native American center as more approachable than one who works at a counseling center?

c. Will students consider both counselors who work at Native American centers and counselors who work at counseling centers as equally approachable, regardless of the students' blood quantum?

d. Will the amount of Indian blood a student has affect his or her willingness to go to either a counselor who works at a Native American center or a counselor who works at a counseling center?

7. Are students' perceptions of a counselor's effectiveness affected by the tribe with which the student is associated?

a. Do students from different tribes have different perceptions of the expertness of Native American and white counselors?

b. Will perceptions of the approachability of a Native American or white counselor be affected by the tribe of the student?

c. Will students from different tribes perceive the trustworthiness of Native American and white counselors in the same way?

d. Does the willingness of a student to see a white
or Native American counselor depend on the tribe to which the student belongs?

8. Will the tribe of the student affect his or her perceptions of male and female counselors?
   a. Will students' perceptions of the expertness of male or female counselors be influenced by the tribe to which the student belongs?
   b. Are students' perceptions of the attractiveness of female or male counselors influenced by the tribe to which the student belongs?
   c. Will students' perceptions of the trustworthiness of male or female counselors depend upon the tribe to which the student belongs?
   d. Will the willingness to see male or female counselors depend on the tribe to which the student belongs?

9. Will perceptions of counselors who work at Native American centers or counseling centers be different for students who belong to different tribes?
   a. Do students' perceptions of the expertness of counselors who work at a counseling center and counselors who work at a Native American center differ according to the student's tribe?
   b. Do students from different tribes have different perceptions of the attractiveness of counselors who work at counseling centers and counselors who work at Native
American centers?

c. Will perceptions of students of the trustworthiness of counselors who work at counseling centers and counselors who work at Native American centers depend on the student's tribe?

d. Are students from different tribes equally willing to see counselors who work at Native American centers or counselors who work at counseling centers?

10. Are students' perceptions of a counselor's effectiveness affected by whether the student has been raised on or off a reservation?

a. Will students' perceptions of the expertness of Native American and white counselors depend on whether the students have been raised on or off a reservation?

b. Will students' perceptions of the attractiveness of Native American and white counselors depend on whether the students have been raised on or off a reservation?

c. Will students' perceptions of the trustworthiness of Native American and white counselors depend on whether the students have been raised on or off a reservation?

d. Will students' willingness to see a Native American or white counselor depend on whether the student has been raised on or off a reservation?

11. Does a student's reservation background affect his or her perception of male and female counselors?
a. Will students who have been raised on a reservation have different perceptions of the expertness of male and female counselors than students who have been raised off a reservation?

b. Will students who have been raised on a reservation have different perceptions of the attractiveness of male and female counselors than students who have been raised off a reservation?

c. Will students who have been raised on a reservation have different perceptions of the trustworthiness of male and female counselors than students who have been raised off a reservation?

d. Are students equally willing to see male and female counselors regardless of whether the students were raised on or off a reservation?

12. Does the reservation background of a student affect his or her perceptions of counselors who work at counseling centers and counselors who work at Native American centers?

a. Do students have different perceptions of the expertness of counselors who work at counseling centers and counselors who work at Native American centers, depending on where the students were raised?

b. Do students have different perceptions of the attractiveness of counselors who work at counseling centers and counselors who work at Native American centers?
depending on where the students were raised?

c. Do students have different perceptions of the trustworthiness of counselors who work at counseling centers and counselors who work at Native American centers, depending on where the students were raised?

d. Are students equally willing to see counselors who work at counseling centers and counselors who work at Native American centers, regardless of where the students were raised?

GENERAL PROCEDURES OF THE INVESTIGATION

A thirteen-minute client-centered counseling audio tape in which a college student expresses concern about his/her academic performance, suitability for college life, and responsibility to family and which was evaluated as being representative of Carkhuff's (1968) facilitative conditions at a level of 3.0 or higher was prepared and coupled with one of six different introductions identifying the counselor on the tape as a (1) male Native American counselor who works at the counseling center, (2) male Native American counselor who works at the Native American center, (3) male white counselor who works at the counseling center, (4) female Native American counselor who works at the counseling center, (5) female Native American counselor who works at the Native American center, or (6)
female white counselor who works at the counseling center.

The tapes were presented to the research sample in conjunction with a slide depicting a male or female who was a white or Native American individual identified as a counselor. The slides and tapes were prepared and presented so as to control the variables of counselor prestige, experience, physical attractiveness, and age, variables which have been shown to influence students' perceptions of a counselor's effectiveness (Atkinson & Carskaddon, 1975; and Littrell & Littrell, 1982).

Sixty male and female undergraduate Native American students at Montana State University were selected by stratified random sample and randomly assigned to one of six investigative groups to listen and to respond to the counseling audiotape of a thirteen-minute counseling session with a Native American student. Students listened to tapes of either a male or female counselor. Female Native American students listened to a tape in which the client was a female student; male Native American students listened to a tape in which the client was a male. Students, after listening to the tape, rated the counselor's effectiveness (expertness, attractiveness, and trustworthiness) on the Counselor Effectiveness Rating Scale (Atkinson, Maruyama, & Matsui, 1978). Each student indicated whether he or she would be willing to take a problem to the counselor on the tape. Students also
responded to a brief biographical questionnaire. Further demographic data for each student were obtained from the records of the Native American center.

Groups were compared by statistical analysis to determine if preferences existed for the sex of the counselor, ethnicity, or place of work, and, if so, if preferences were influenced by the sex of the student, blood quantum, tribal affiliation, or reservation background and to determine if Native American students varied by sex, blood quantum, tribal affiliation, or reservation background in their willingness to see a client-centered counselor. Results are reported and discussed in light of current literature reporting research of preferences as determinants of counseling center use and in terms of relevance to the counseling services at Montana State University. Results are also discussed in relation to their significance in understanding the special counseling needs of Native American students in college or university settings throughout the country.

LIMITATIONS

This investigation was delimited to a stratified random sample (n = 60) of the undergraduate Native American student population of Montana State University. It was also delimited to students' responses to an initial
interview between a client-centered counselor and a college student.

DEFINITION OF TERMS

For the purpose of this investigation, these definitions were applied:

Attrition is leaving college or university, for any reason, before completing requirements for a degree.

Blood quantum is the percentage of Indian blood a student has.

Counseling center is a particular location on a college campus which is designated as a place where all students can go to receive assistance with academic, personal, or vocational problems from trained individuals in a confidential setting.

Counselor affiliation or counselor place of work, terms used interchangeably in this study, is the association of the counselor with one of two particular departments of the university, either the college counseling center or the Native American center.

Counselor effectiveness is defined as the qualities of expertness, trustworthiness, attractiveness, and utility as they are measured by the Counselor Effectiveness Rating Scale (Atkinson, Maruyama, & Matsui, 1978). Atkinson defines expertness as skill, competence, and expertness;
attractiveness as approachability, friendliness, and likability; and trustworthiness as trust, sincerity, and reliability.

*Dropout* is a student who leaves school, for any reason, before graduation (Good, 1966).

A *Native American center* is a particular location on a college campus which is designated as a meeting place or clearinghouse for Native American students and which is staffed by personnel who see their responsibility as assisting Native American students to be successful in college.

*Native American students* at Montana State University are students who have voluntarily registered themselves as such with the Native American Center or who have been identified as Native American by the Native American Center, through registration or financial aid information. Throughout the discussion, Native American student and Indian student are terms used interchangeably.

A *Native American Studies program* is defined as a particular curriculum or group of courses which relates to Native American culture and is identified by the college or university offering them as such.

*Tribal affiliation* is the Indian tribe or confederated tribes to which a student belongs. For this research, tribal affiliation is also defined to be the tribe or tribes to which a student claims affiliation.
SUMMARY

The history of American Indian education shows that from the time white Europeans arrived in America and began providing for the education of Indians until the mid-twentieth century, efforts to educate Indians failed. Concern, investigation, and awareness in the late 1960's and early 1970's brought about renewed interest in Indian education. Part of this renewal was a greater interest in higher education for Indians and a commitment to reduce the dropout rate of Indian students engaged in higher education.

Considering the need for adequate counseling services that American Indian educators express, the role of college counseling centers in providing these services in colleges and universities with a significant Native American population, the correlation of counseling with student success in college, and the influence of student attitudes upon the success or value of counseling, this research proposed to investigate Native American student attitudes toward counselor characteristics of sex, ethnicity, and place of work and the effect of Native American student characteristics of sex, blood quantum, tribal affiliation, and reservation background on these attitudes.

The investigation utilized Montana State University
undergraduate Native American students' ratings of the
effectiveness (competence, approachability, and
trustworthiness) of white and Indian counselors of both
sexes affiliated with either the counseling center or the
Native American center and also utilized selected
biographic and demographic data to determine the
preferences of Native American students for the specific
counselor characteristics mentioned.
CHAPTER II

LITERATURE REVIEW

As colleges and universities endeavor to meet the needs of troubled students, several variables have emerged as discouraging to students' use of counseling services. Rosen (1967) makes a point well heeded: Of what value are counseling services if students do not use them? Investigations and discussions of these important variables are reported in this chapter. The first section of the chapter reports perceptions and expectations students have of counseling services; the second, their preferences for counselors. Particular note is made of perceptions and preferences of minority students, particularly Native American students, as they compare to those of other students.

PERCEPTIONS OF COUNSELING SERVICES

Need for Counseling Service

Not all pressure upon students is negative by any means, but pressure becomes a serious problem when students see more demands upon them, from various sources, than they feel capable of meeting (Bevan, 1965). Bevan contends that students who come to the university unaware that the values
of the system will be different from their own, who come without adequate preparation for the academic demands, who are unaware of the university's goals and standards of performance, who have not clearly determined what their own goals at the university are, who overemphasize grades, and who are unprepared for a strange and often impersonal milieu without the support of a primary group are the ones who will suffer most. Research supports that these are indeed the pressures that create problems for students (Bevan, 1965).

During the 1950's, freshmen college students, surveyed to establish their most common difficulties in college, responded that adjustment to college work, an academic matter, was their most common difficulty (Koile & Bird, 1956). The next largest areas of problems students were concerned about were social and personal problems. Students reported being least likely to be concerned about the other areas proposed by the researchers: home and family; morals and religion; curriculum and teaching procedures; courtship, sexual relationships, and marriage; the future; vocational and educational matters; finances; and health and physical development. These students admitted having a large number of concerns; on the average, women identified seven problems as "most troubling" to them and twenty more as "troubling"; men identified seven as "most troubling" and thirteen more as "troubling."
In a large survey of all levels of college students a few years later, Rust and Davie (1961) found that two-thirds of the students identified some problem that was of concern to them and 37% believed their problems were serious enough to interfere with their studies. They reported, most often, problems with finances or commuting, family relations, and academic and vocational concerns.

Surveyed a few years later, undergraduate students said financial concerns, academic adjustment, scholastic difficulties, future planning, and emotional adjustment were their most serious problems, and financial concerns, emotional adjustment, academic adjustment, and scholastic difficulty were their most commonly occurring problems. Problems of less concern to them in terms of both seriousness and frequency were health, social, and administrative problems. In scholastic matters and financial aid, particularly, students reported needing more help than they were getting. This study, conducted in the mid-1960's (Penney & Buckles, 1966), a time of political and social uncertainty, did not find those uncertainties to be reflected in students' expressions of their difficulties.

Regardless of sex, year in school, or GPA, grades had become the single most common pressure felt by college
Worries about relationships and other personal and social adjustment problems were also important problems to college students, but these were reported as pressures to be coped with less often than grades and finances. This survey, made during 1972, challenged and found unsubstantiated the theory that worry over being drafted was of "universal importance" to college males.

In the most recently published survey of a general student population, college students still report themselves to be experiencing considerable stress (Benedict, Apsler, & Morrison, 1977). Seventy-six percent of them express and recognize a need for help with at least one problem: 39% with academic concerns, 35% with vocational matters, and 29% with personal problems.

Although we cannot assume that minority students respond to college pressures in the same way as students in general (Burbach & Thompson, 1971), we know that they too feel and express a need for help with problems. Minority students indicate that their concerns differ somewhat from the white student population (Westbrook, Miyares, & Roberts, 1978). Blacks report more concern with academic matters and finances than whites. We can assume that students who are less well academically prepared for college feel a need for help with academic concerns; Gold et al. found it also true that black and Indian students with a background of lower financial and academic status
than other students reported more emotional problems than students more adequately prepared as well (Gold, Garner, Murphy, & Weldon, 1980).

American Indian high school students indicated that personal problems, money problems, and making decisions are most frequently concerns for them. But it is difficult to know how similar to college students these high school students may be (Dauphinais, LaFromboise, & Rowe, 1980). Bevan (1965) has noted that many of the pressures college students feel are new and unique to college life.

Overall, students appear rather quickly to become aware of difficulties in adjusting to college life and perceive a need for help with their problems. With some small variation, the problems they report have been basically the same over the past two or three decades. Academic concerns appear most troubling, then financial and vocational problems, and then emotional problems.

Role of Counseling Service

Available to assist students in resolving their problems in those areas, among other resources, is the college counseling service. Gallagher and Demos (1970) define the counseling center as "the major agency for assisting students with a variety of problems" (p. 12). Most important in the development of counseling centers was that "the counseling center was to have a unique role in the total educational process. It was to be a place where
a student could discuss any problems in a nonjudgmental atmosphere" (p. 32). However, counselors' perceptions of their role and services are somewhat singular to them and not the perceptions that students have.

Over two decades ago, Warman's (1960, 1961) prototype studies to establish the role of counseling centers and to determine differential perceptions of that role established that the counselors had a different set of problem priorities for counseling than students and others had. The most appropriate concerns to be discussed at the counseling service, according to counselors, were first, problems having to do with vocational concerns, next, those dealing with adjustment to self and others, and last, problems involving academic routine.

Warman's study and results were replicated in Canadian counseling centers (Ogston, Altmann, & Conklin, 1969) and later further replicated in the United States (Gelso, Karl, & O'Connell, 1972; Kohlan, 1975; Resnick & Gelso, 1971; and Wilcove & Sharp, 1971) to find that counselors reported appropriate problems for discussion to be adjustment to self and others, vocational choice, and college routine, in that order, except the Gelso et al. study which found counselors reporting adjustment to self and others, college routine, and vocational choice to be appropriate. Using different approaches, Gelso, Burk, Utz, and Silver (1977) found that counselors believed personal adjustment
counseling to be most important and educational-vocational counseling less important; and Henggeler, Sallis, and Cooper (1980) found in their survey that career choice, academic problems, coping with stress, and depression were considered to be the four most serious mental health problems among students and their families. Overall, counselors seem to believe personal adjustment problems are more appropriate concerns to bring to a counseling center than educational-vocational problems.

Student Perceptions of Counseling Service Role

Need for counseling. Those students who have been asked if they endorse the counseling service are overwhelmingly in favor of its existence on a campus: 84% endorsed strongly (Form, 1953); 91% favored (Fullerton & Potkay, 1973); 90% supported (Dreman & Dolev, 1976); and 96% believed the counseling center was necessary (Benedict, Apsler, & Morrison, 1977). Students saw the counseling service as third in importance in a list of ten personnel services, outranked only by financial aid and placement services (Pinsky & Marks, 1980). Blacks were found to have attitudes toward the counseling service that were essentially the same as whites, although that conclusion was not true for several other facets of student personnel services, areas such as health service, housing, and the judicial system (Amprey & Gilbert, 1977). Students who had used the college counseling service were more likely to be
strong in their support of the need for such services (Amprey & Gilbert, 1977; and Form, 1953).

Appropriate problems. Students' opinions differ somewhat from counselors about what kinds of problems were most appropriate to take to the counseling service for discussion but their ranking of appropriateness closely parallels the results of surveys to determine what their felt problems were. When asked to rank personal adjustment problems, vocational, or academic problems according to their appropriateness for discussion at a counseling service, they rank order them academic, vocational, and personal, in contrast to the counselors' ranking of personal, vocational, and college routine-academic (Benjamin & Romano, 1980; Gelso, Karl, & O'Connell, 1972; Hudesman, Wiesner, & Warman, 1976; King & Matteson, 1959; Resnick & Gelso, 1971; and Wilcove & Sharp, 1971). Similar results are reported by Gelso et al. (1977) and Shueman and Medvene (1981) who found students ranking educational-vocational problems as more appropriate than personal. Those students who were identified as having used college counseling services were more likely to see different kinds of problems as equally appropriate for discussion at a counseling center (Hudesman, Wiesner, & Warman, 1972; and Snyder, Hill, & Derksen, 1972).
Willingness to Use Counseling Services

Although many students express a need for help with their problems and most see the value of a counseling service, surprisingly fewer students say that they would actually be willing to use the counseling center. The following statistics contrast students support of counseling services with their willingness to use them:

(1) 93% supported offering counseling services but only 63% would actually consider using them (Fullerton & Potkay, 1973), and

(2) 96% felt counseling services were needed yet only 47% thought they would ever actually use them, even though 76% of this group had indicated a need for help with some problem (Benedict, Apsler, & Morrison, 1977).

Many would seek help instead from a source outside the college (68%), according to Koile & Birde (1956). Others would seek help from friends (Kramer, Berger, & Miller, 1974), or, more specifically, from a boyfriend, girlfriend, or a roommate (Hummers & DeVolder, 1979). At a predominantly black university, 71% would seek help from a counselor for a vocational-educational problem but would be most likely to keep personal problems to themselves (Johnson, 1977).
COUNSELING CENTER USE AND VALUE

Type of Problem

Student use is weighted heavily toward concerns of an academic or vocational nature; less frequently do students use the service for problems of a personal nature (Berdie & Stein, 1966; Frank & Kirk, 1975; and Johnson, 1977).

Actual Use

Percentages of students who do ultimately use the counseling service are low. Depending upon the university and varying somewhat with the kinds of programs offered (counseling services which provide programs of reading or study skills report greater use of their services) the proportion of students using the counseling center ranges from 3% to 60% of the student population. In the earliest of these surveys of use, a large number of randomly sampled students, 60%, had used the counseling service at Michigan State University (Form, 1953). Southern Illinois University found about 3% of its student population used the counseling center during a spring quarter (Snyder, Hill, & Derksen, 1972), but spring quarter is a time of low counseling center use; 23% of a Berkeley freshman class, followed through four years, used the counseling service at some time (Sharp & Kirk, 1974) while Washington State University's counseling service sees about 7% of its student population during any one year (Minge & Cass,
1966). Of a random sample of Ohio State University students, 24% had used the counseling service at some time (Carney & Barak, 1976) and 40% of randomly sampled freshmen at Western Illinois University had used the counseling service by the end of their first student year (Hummers and DeVolder, 1979).

**Effectiveness as Measured by Satisfaction**

Any evaluation of the effectiveness of a counseling service includes multiple criteria measures: actual use, performance records, personal and social adjustment as viewed by both the client and others, various personality dimensions and, perhaps the most obvious, the client's satisfaction with what he or she received. The use of this last criterion for evaluation is less important theoretically than practically. Turning out dissatisfied clients will have severe consequences for a counseling service in a university setting which usually depends on word-of-mouth advertising and self-referral of clients (Goodstein & Grigg, 1959). Researchers have found that students are generally pleased with the services they receive from counseling centers (Carney, Savitz, & Weiskott, 1978; Form, 1953; and Minge & Cass, 1966).

**Effectiveness as Measured by Behavior Change**

Another viable and relatively easily measured criterion of the value of a counseling service is the change in behavior that students experience from using it.
Grades and graduation rates are particularly important measures of the value of counseling when studying the success of an individual as a college student. Users of a counseling service are more likely than non-users to graduate and are also less likely to leave the university in bad standing (Frank & Kirk, 1975). Within the group of students who use the counseling service, students who are self-referred have a higher rate of graduation and higher GPA's than students who are referred by others (Redding, 1971) and a significantly greater proportion of counseled students graduate than do non-counseled students (Shepherd, 1965).

**Effects of Students' Perception on Outcome of Counseling**

Cognitive variables such as client beliefs, attitudes, perceptions, and expectations are often significant in affecting the process and the outcome of counseling and psychotherapy (Frankel, 1969; Goldstein, 1960; and Sapolsky, 1965). Therefore, an important variable in the continuation of counseling as well as the outcome of counseling is the students' favorable perception of the university counseling service and its counselors.

**STUDENT EXPECTATIONS AND PREFERENCES AS PREDICTORS**

Meeting students' preference for a counselor (preference based on counselor characteristics) resulted in
counseling which received a higher rating on an interaction scale scored by trained raters (Ziemelis, 1974). If the quality of an individual session is better, the outcome of the counseling is likely to be better. Similarly, clients who perceived counselors that they listened to on tapes to be expert, attractive, and trustworthy were very optimistic that the client on the tape would return and would be helped, feelings that presumably express positive expectations resulting from this favorable attitude toward the counselor (Cash, Kehr, & Salzbach, 1978). On the other hand, white subjects who were selective about the counselor's age, sex, and socio-economic status were also more reserved about disclosing personal information about themselves, reflecting a lack of trust in the counselor, and, by extension, resulting in less successful counseling (Casciani, 1978). Black clients believe white counselors are not as likely to adopt another person's frame of reference as black counselors are (Wright, 1975); blacks going into a counseling relationship do not have a feeling of trust for the counselor who is white, although Wright suggests this perception might be changed by the counseling process. Yet Proctor and Rosen (1981) found that failure to meet preferences of black non-college clients for black counselors did not affect actual counseling outcomes as measured by dropout rate and satisfaction in a mental health clinic. In view of the fact that only white
counselors participated in the study, the results do not imply that blacks did as well with non-preferred (white) counselors as they would have with preferred (black) counselors.

STUDENT PREFERENCES FOR SEX OF COUNSELOR

The variable of sex preference as a factor in counseling has been the subject of considerable research. Since we can expect more positive results from counseling in which the counselor meets the expectations and preferences of the student (Frankel, 1969; Goldstein, 1960; and Sapolsky, 1965), it is useful to determine if sex preferences are strongly held by potential users of a counseling service.

In an early study, Koile and Bird (1956) found that for the greatest number of problems, freshmen women had no preference for sex of counselor. When they did have a preference, they were more likely to prefer women. Men said that they had no preference as often as they said that they preferred to be counseled by a man. A decade later, males preferred a male counselor for both vocational and personal counseling and females had no preference for sex of counselor for vocational concerns but preferred a female for personal counseling (Fuller, 1964). In more recent studies, males' preference for female counselors has been
found to be increasing, perhaps as a result of the feminist consciousness-raising efforts of the past decade (Johnson, 1978). We see also that students who have a sex preference have more stereotyped perceptions of both sexes. And both sexes expected males to be more like the stereotyped masculine role than they expected females to be like the stereotyped female role (Johnson, 1978). One might suppose, of course, that many students do not have a preference for sex of counselor. In fact, in a recent study many students of both sexes had no preference; males were less likely than females to have a preference, but those females who did express a preference chose female counselors. These results contradict earlier studies and the authors, Walker and Stake (1978), theorize that attitudes in the general population toward sex preference may have changed during the past decade.

Although a significant preference was not found in their research, Gordon & Grantham (1979) found a tendency for the students they surveyed to prefer a same sex counselor. The sample was composed of a group of "disadvantaged students" which included members of minorities—blacks, Puerto Ricans, disadvantaged whites, and "others."

For their research, Highlen and Russell (1980) defined feminine counselors as sympathetic, supportive, warm, and understanding; androgynous counselors as independent,
assertive, energetic, compassionate, and supportive; and masculine counselors as assertive, independent, analytical, efficient and objective. Given these characteristics, students' ratings of counselors were not affected by counselor sex but were affected by those identified sex roles: female students preferred feminine counselors first, then androgynous counselors.

High school Indian and white students, rating white counselors, expressed a moderately strong preference for the sex of the counselor. Males from both races preferred male counselors when discussing personal concerns. Female Indian students strongly preferred a female counselor for personal concerns (Littrell & Littrell, 1982). The researchers theorize that these data may reflect a strong traditional pattern of same sex interaction and support among Indian women, a consideration in providing counseling services for Indian students.

STUDENT PREFERENCES FOR COUNSELOR RACE

The race variable in counselor preference is one that cannot be de-emphasized. "Although the counselor may be imbued with empathy, positive regard, unconditionality of this regard, and congruence . . . he is in spite of himself rendered professionally impotent if the client rejects him on sight simply because of the fact that he is white"
(Vontress, 1969). Failing to take into account the racial preferences of a client can result in a nonproductive counseling relationship. Black clients who had stated a preference for a black counselor but who were assigned to a white counselor responded to the counselor in a socially desirable rather than an authentic manner (Sattler, 1970), a behavior that would be detrimental to forming a good counseling relationship and would therefore have a negative effect on the counseling outcome.

Black counselors were found to be preferred by both client and non-client black students at Georgia State University (Barker, 1979), and, in a study at a large midwestern university, black students' preference for a black counselor was strongest among males and among students presenting emotional concerns (Abbott, Tollefson, & McDermott, 1982). Black students believed that black counselors better understood black students, were more able to relate to their concerns, and were more accepting of black students than white counselors were. These blacks were more likely to have no race preference when the problem concerned was related to information-giving rather than personal-emotional or educational-vocational counseling.

Thompson and Cimbolic (1978) also found that black students were more likely to take their problems to the counseling center if their preferred counselor were to be
seen. These black students preferred black counselors regardless of the type of problem (personal, educational, or vocational).

Experience may be a variable which supersedes race. Black freshmen did not prefer a black counselor over a white if the black counselor was inexperienced and the white was experienced, but if both were experienced, the black counselor was rated more highly (Cimbolic, 1972). More students were willing to return to the black experienced counselor (16 of the 17 subjects) than to any of the other counselors (four counselors in all: white and black experienced counselors and white and black inexperienced).

All persons of one race are certainly not the same and may well express different counselor preferences. A within-race variable found to have an effect on racial preference is racial self-designation. Students who consider themselves to be "black" or "Afro-American" were found to prefer black counselors but those who identified themselves as "Negro" or "colored" did not express a preference (Jackson, 1973). Sex, age, and socio-economic status were also examined but were not variables that affected preference.

Considering Grantham's research (1973) which established that attitudes toward another race might depend on the subject's racial self-concept, Parham and Helms
(1981) attempted to determine if dividing a black population into four stages of racial development would show that the group of individuals in the early stage preferred white counselors and the group in the last stages preferred black. They found a trend, not reaching a significant level, for each group to have a preference in the expected direction.

Although knowledge of any minority group's preference is helpful in determining that another minority group might also hold unique preferences, what may be appropriate for people from one race or culture may not be appropriate for another. The Asian culture has a family communication system which is based on paternalism, a system in which authority and consequently communication originate from the father. This system teaches children to hide and restrain their emotions. Atkinson, Maruyama, and Matsui (1978) thought that we could expect people with such a cultural background to be uncomfortable with affective counseling. They found Asian-descent subjects to prefer counseling that was directive as opposed to nondirective and Asian counselors as opposed to Caucasian. Their results held true for university students but not for youth in a religious group, perhaps, the authors suggest, because the university students had a stronger awareness of their cultural history.

Counseling style and race (ethnicity) were also
variables in a study by Dauphinais, Dauphinais, and Rowe (1981). Use of a non-directive style was considered to be less effective by Indian high school students rating a counseling tape than were directive and an "experimental" style (utilizing direct guidance, approval, and reassurance). However, these students clearly rated a counseling interview higher when they believed the counselor to be an Indian.

Two similar studies using Indian high school populations found that Indian students believed it was important that a counselor be someone they could trust but that it was not important to them that the counselor or helper be an Indian (LaFromboise, Dauphinais, & Rowe, 1980). Trustworthiness was the more important variable in the second study as well. Counselor effectiveness was rated more highly when the students judged the counselor to be someone they could trust. In this study, ethnicity was not important. In fact, students were more likely to choose the non-Indian counselor as "someone I would go to see if I had a problem" than the Indian counselor (LaFromboise & Dixon, 1981). But different pressures felt by college students might produce preferences and attitudes different from high school students (Bevan, 1965).

In a survey of Native American college students at Montana State University, students reported a preference for a male Indian counselor, a preference that was not
affected by the kind of problem with which they were concerned (Haviland, Horswill, O'Connell, & Dynneson, 1983).

STUDENT PREFERENCES FOR COUNSELOR AFFILIATION

Aware that the accoutrements of the profession and/or the physical location and environment might have a negative effect on students' perceptions of counselors and counseling services, Smith (1974) attempted to determine if changing the image of the counselor and the location of the services might be preferred by students. He found that students preferred, about equally, an on-campus comprehensive (centralized) counseling center or a decentralized counseling service located at several readily accessible locations on campus. The decentralized locations they were most likely to prefer were the office of the Dean of Men/Women or an off-campus counseling center.

In dealing with minority students, it would seem reasonable to provide alternative settings which might not be so strongly associated with the white middle class system which has come to have negative associations for many minorities (Calia, 1966; Spang, 1971; Sue, 1978; and Vontress, 1970). There appears to have been no research investigating this issue of possible preference for one
setting, locale, or affiliation over another.

SUMMARY

Literature reports that counseling services are perceived as a necessary part of student services on a college campus, although the role of such services is perceived somewhat differently by counselors and students. Students are less likely to use counseling services themselves, however, than they are to believe that such services should be available for other students, even when they perceive themselves to have distressing problems. Students who do use counseling services report, on the whole, being satisfied with the help they receive and statistics reporting higher graduation and lower dropout rates for students who use counseling services support students' perception of the value of counseling services.

Research also shows that the outcome of counseling is affected by students' perceptions; thus, student expectations and preferences are to some extent predictors of successful counseling. Student preferences for sex of counselor appear to have changed over the past two or three decades; contrary to earlier findings, males are now less likely than females to have a preference and both sexes are now more likely to prefer a female counselor than they were in earlier studies. Same race appears to be an important
preference for blacks and Asian-Americans but preference for same race (ethnicity) counselors by Indian students appears to be less clear-cut. A single research study examining the affiliation of the counselor or the physical location of the counseling service suggests that the traditional college counseling center might not be the most appropriate setting from which to offer counseling services to students.
In the past, American Indians have received an education that has been inferior in many ways. In the last two decades, a re-examination of our values as they influence behavior toward other people has brought about a change in attitudes and behavior toward minority groups. Both Native American and other educators have been attempting to recognize the needs of Indian students and to provide educational services that can be useful to these Indian students. Aware of the difficulty American Indian students have in completing a college education, educators are suggesting that college counseling services to American Indian students need to be examined and improved.

A description of the procedures that were used to collect data to determine (1) if certain characteristics of the counselor affect Native American students' perception of the counselor and willingness to see the counselor and (2) if the perceptions Native American students have of counselors and their willingness to see counselors are affected by demographic differences among the Native American students follows. The population of the study and the method of drawing the sample that provided the data are
described; the variables that were examined are identified and discussed; the method of collecting the data and the instrument used are described in detail; the statistical hypotheses that were tested are specified; and the manner of analyzing the data to determine acceptance or rejection of the hypotheses is identified. Precautions taken for accuracy are noted as well.

POPULATION

Montana State University

The population of this study consisted of all Native American students enrolled at Montana State University during winter quarter, 1983. Montana State University was established in 1893 as the Agricultural College of the State of Montana. As a land-grant college, Montana State is supported mainly by legislative appropriation, student fees, and land-grant income. Now, in 1983, programs are provided by six colleges and two schools within the university: the College of Engineering (27% of student enrollment), followed by the enrollment in the College of Letters and Science (15%), the School of Business (13%), the College of Arts and Architecture (9%), the College of Agriculture (9%), the College of Education (9%), and the School of Nursing (6%). Eleven percent of the student population at Montana State University is not enrolled in any school or college and is identified as being part of
the General Studies program.

The total student population of which the study population is part numbered 11,233 students at the completion of registration for autumn quarter, 1982. Of the number of students enrolled at Montana State University, 9905 are undergraduate students, 737 are graduate students, and 591 students are enrolled in special categories, classified as neither graduate nor undergraduate students (non-degree students).

By far the majority of students are Montana residents (83% or 9323 students); of the total number of students (11,233), only 14% (1573) are out-of-state students and another 3% (337) are students who are legal residents of another country.

The percentage of male students at Montana State University is somewhat larger than the percentage of females: 58% are male (6479 students) and 42% are female (4754 students).

Native American Student Population

The Native American student population at Montana State University, as determined from a voluntary declaration of ethnicity to the Native American center and from enrollment statistics gathered from several sources, numbered 125 students during winter quarter, 1983, slightly less than 2% of the population of the university. Female Native American students outnumber males, 78 (55%) to 64
Of these students, 38% were freshmen, 21% were sophomores, 18% were juniors, 11% were seniors, and 10% were graduate students.

By law, the university system in the state of Montana provides a fee waiver type of scholarship assistance to all Native American students possessing at least 25% Indian blood. The amount of assistance, for regularly enrolled Native American students who qualify, is $159 per quarter.

**Sampling Procedure**

For this investigation, a random sample of sixty students was drawn, stratified according to sex, year of student in school, and college major, from the Native American undergraduate student population according to the percentages known to be in that population. Students in this sample were invited to participate in the research and were offered an honorarium of $5.00 if they were willing to participate. Students who declined (ten students of the original sample declined) were replaced by students of like characteristics drawn in the same manner until a sample of sixty students who agreed to participate had been assembled.
INVESTIGATIVE CATEGORIES

Independent Variables: Counselor Characteristics

Three counselor characteristics were identified as independent variables for this research: ethnicity, sex, and place of work.

Ethnicity. This investigation examined, first of all, the variable of counselor ethnicity in relation to student perceptions of counselors available to them through the university. Counselors were identified as either Native American or white.

Sex. In addition to ethnicity, the variable of sex of counselors was considered in examining the perceptions of students toward counselors at Montana State University. Both female and male counselors were identified in the study.

Place of Work. The investigation also examined the counselor's place of work as a variable: Counselors were identified as affiliated with either a university counseling center or with a Native American center.

Independent Variables: Student Characteristics

Four student variables were identified as independent variables for this research: sex, blood quantum, tribal affiliation, and reservation background.

Sex. Sex of the Native American student was considered as a variable in the study.

Blood quantum. Blood quantum, the percentage of
Indian blood a student has, was considered as a variable of Native American student characteristics. Students were grouped as having (1) low blood quantum, less than 50% Indian blood, (2) medium blood quantum, 51% to 75% Indian blood, or (3) high blood quantum, 76% to 100% Indian blood.

**Tribal affiliation.** The tribe that a student is affiliated with was also considered as a variable. Five tribes (or confederated tribes) which were found to make up 88% of the Native American population were identified: (1) Crow, (2) Chippewa-Cree, (3) Blackfeet, (4) Assiniboine, and (5) Northern Cheyenne. Three other tribes represented in the sample; Salish-Kootenai, Sioux, and Navajo, were not represented by numbers sufficiently large to allow statistical analysis and were not considered in the statistical portion of this research.

**Reservation background.** Another characteristic of Native American students considered as a variable was reservation background. Students were grouped according to whether, at the time they enrolled in college, (1) they lived on a reservation or (2) they lived off the reservation.

**Dependent Variables: Student Attitudes toward Counselors**

The third major group of variables for this study was the attitudes of students toward counselors. Attitudes were examined in regard to students' perception of
counselors' effectiveness and their utility to students.

Effectiveness. Counselor effectiveness was defined as the combination of the scores of the three variables of competence, trustworthiness, and attractiveness as measured by the Counselor Effectiveness Rating Scale. Each of the three variables were considered individually.

Utility. The usefulness that the student perceives the counselor to have for him or her, utility, was determined by the student's indication of willigness to talk to the counselor if the student had a problem.

DATA COLLECTION
Procedure

Students who were selected as subjects through the sampling procedure described above were randomly assigned to one of six investigative groups, identified as (1) Native American male counselor affiliated with the college counseling center, (2) Native American female counselor affiliated with the college counseling center, (3) Native American male counselor affiliated with the Native American center, (4) Native American female counselor affiliated with the Native American center, (5) white male counselor affiliated with the college counseling center, and (6) white female counselor affiliated with the college counseling center. Each of the six groups of students consisted of ten Native Americans.
Subjects were contacted by letter and informed that they had been selected to help rate counseling tapes that were to be used for training student counselors working with Native American students. They were told that to rate the tape would take about twenty minutes of their time and that, in appreciation of their help, they would receive $5.00 upon completion of the rating. Each person who responded was then assigned a time to hear the tape. Subjects who did not respond to the mailed invitation received telephone invitations to participate in the study. Times to rate the counseling tape were arranged according to the convenience of each student.

Subjects met individually or in small groups of two or three to listen to the thirteen-minute segment of a client-centered counseling interview between a male or female student and either a male or female counselor. The same interview script was used in all conditions (counseling scripts are described below.)

Students heard one of the two following introductions of the counselor on the tape:

(1) "This counselor, who has a Ph.D. in counseling psychology, is 34 years old and has been counseling in a college counseling center for four years."

(2) "This counselor, who has a Ph.D. in counseling psychology, is 34 years old and has been counseling in a Native American center for four years."
Subjects were then shown a color slide of a Native American or a white counselor and told that they were being shown the slide "to make the counselor on the tape seem more real" to them. Subjects were told that they would be listening to the beginning of a counseling session and that they would be asked to give their opinion of the counselor on the tape afterwards.

On the counseling audiotape, the student expressed concern about his or her college performance. The student began by discussing poor grades in college and continued by discussing a sense of failure as an individual, frustration, fear of disappointing loved ones, and poor self-esteem. (A copy of the counseling script is attached in the appendix.) The counselor on the tape responded appropriately (3.0 on Gazda's adaptation of Carkhuff's scale; Gazda, 1973) for an initial client-centered interview.

After listening to the taped segment, students expressed their perception of the counselor by filling out the Counselor Effectiveness Rating Scale (described below). Subjects were also asked to identify themselves on the rating scale according to their sex, tribe, and blood quantum.
Attempts were made to control variables other than the research variables (sex, ethnicity, and place of work) which might have influenced students' perceptions of the counselors.

To control the effects of physical attractiveness, slides of counselors judged to be equally attractive and of approximately the same age were used. Two upper-level undergraduate communication classes with a total enrollment of 60 students viewed an assortment of 16 slides of white and Native American males and females ranging in age from 19 to 45. These students were asked to rate the slides for physical attractiveness and age. Slides of a Native American male, Native American female, white male, and white female were then selected, to be presented with the taped counseling interview, from those which had been judged by these students to be approximately equal in physical attractiveness and age. The individuals on the four slides chosen for use in the study were judged to be in the 31 to 35 year age bracket by at least fifty percent of the students judging the slides, and the individuals in these four slides were also judged to be of about equal attractiveness, more attractive than the mean for all 16 slides but less than one standard deviation above the mean (individual slide mean ratings of 2.60, 2.58, 2.62, and 2.58; \( x = 2.39, \text{SD} = .92 \))
To control the effects of counselor prestige and experience on the perceptions of the students, the counselor was introduced in all conditions as a counseling psychologist who had four years of experience counseling Native American students.

Finally, to control possible effects of counselor dress on the students' perceptions of counselors, similar moderately casual attire was worn by all four counselors (Littrell & Littrell, 1982). The male counselors wore a sports shirt with no tie and a brown corduroy sports jacket; the female counselors wore a brown tweed blazer over a colored blouse and wore earrings but no other visible jewelry.

Counseling Scripts

On the thirteen-minute counseling script of an initial client-centered counseling session, the student expressed concern about his or her college performance; poor grades in college, a sense of failure as an individual, frustration, fear of disappointing loved ones, and poor self-esteem. The counselor on the tape responded appropriately for an initial client-centered interview.

The appropriateness of the response was determined by three university counselors associated with the counseling center who independently rated the tapes according to Gazda's adaptation (1973) of Carkhuff's counselor response rating guidelines. The script met the conditions of a 3.0
level of facilitation, conditions which both Gazda and Carkhuff agree are optimal for an initial counseling interview. Before rating the script, the counselor raters achieved inter-rater reliability of .92 in independent trial ratings (Ebel, 1972). (Results of the inter-rater reliability tests and ratings of the counseling script can be found in the appendix.) The counselor and student roles on the audiotaped scripts were rehearsed and recorded by theatre students and graduate student counselors at the university.

**Instrument**

After hearing the introduction, seeing the slide, and listening to the thirteen-minute taped interview, subjects were asked to rate the counselor on the Counselor Effectiveness Rating Scale (CERS). The original Counselor Effectiveness Rating Scale, a semantic differential questionnaire, was developed in 1975 by Atkinson to be used to rate counselor credibility. Five concepts were measured on three 7-point bipolar scales (bad = 1, good = 7) representative of the evaluative dimension of meaning, as derived from Osgood, Suci, and Tannenbaum (1957). The five concepts measured on the original scale were (a) the counselor's knowledge of psychology, (b) the counselor's ability to help the client, (c) the counselor's willingness to help the client, (d) the counselor's comprehension of the client's problem, and (e) the counselor as someone the
rater would go to see if she or he had a problem to discuss. The questionnaire was used by volunteers from a community college introductory psychology class, a county mental health clinic, and drug abuse programs in a federal correctional facility for men and a state correctional facility for women. These volunteers rated fifteen-minute videotapes of counseling to establish perceived counselor credibility in Atkinson's study to determine the effects of a high-low prestige introduction on the subjects' perception of the counselor.

The instrument has been adapted for use with minority students by Atkinson, Maruyama, and Matsui (1978). Based on conclusions drawn by Strong (1968) that counseling is an interpersonal influence process in which perceived counselor credibility consists of two components, perceived expertness and perceived trustworthiness, Atkinson et al. postulated that minority groups might perceive a majority group counselor as expert but not trustworthy, and therefore used the CERS to rate the counselor on three concepts related to expertness (the counselor's expertness, the counselor's ability to help the client, and the counselor's knowledge of psychology) and three concepts related to trustworthiness (the counselor's trustworthiness, the counselor's sincerity in his or her willingness to help the client, and the counselor's tendency to maintain confidentiality) and a seventh concept.
of perceived counselor utility (the counselor as someone I
would go to see if I had a problem to discuss). Raters
were 48 Japanese Americans ranging in age from 15 to 26
years, attending high school or college, who rated an
eleven-minute counseling audiotape in which counseling
approach and race were variables.

The CERS was later used (1981) by Dauphinais,
Dauphinais, and Rowe to assess 102 American Indian high
school students' perceptions of counselor effectiveness.
Dauphinais et al. note that semantic differential scales
have been shown to be useful when used across cultures and
specifically with Native American subjects.

The revised CERS contains three concepts related to
perceived expertness (the counselor's expertness, the
counselor's competence, and the counselor's skill), three
concepts related to perceived trustworthiness (the
counselor's sincerity, the counselor's reliability, and the
counselor's trustworthiness), three concepts related to
attractiveness (the counselor's friendliness, the
counselor's approachability, and the counselor's
likability), and one concept related to perceived counselor
utility (the counselor on the tape as someone I would go to
see if I had a problem to discuss).

The CERS is reported to have a reliability coefficient
of its total score of .93 and a reliability coefficient of
the expertness, trustworthiness, and attractiveness.
dimensions of .88, .65, and .78, respectively (Atkinson, 1982). The total CERS has been found to be highly correlated (.85) with the total Counselor Rating Form, for which LaCrosse (1980) has established predictive validity.

Subjects of this research rated each of the nine concepts (then summed to provide three rating scores, one each for expertness, attractiveness, and trustworthiness) on a seven-point bi-polar scale (bad = 1; good = 7). The last concept, counselor utility, was determined by a yes-no response to the statement "The counselor on the tape is someone I would go to see if I had a problem to discuss."

STATISTICAL HYPOTHESES

To answer the general questions of this study identified in Chapter I, the following null hypotheses were developed. All hypotheses refer to ratings determined by the Counselor Effectiveness Rating Scale, and the terms effectiveness, expertness, attractiveness, and trustworthiness are used as defined by that scale.

Sex of Student and Counselor Ethnicity

Hypothesis 1: Native American students' perceptions of counselors' effectiveness will not be affected by the sex of the student or the ethnicity of the counselor.

a. There will be no significant effects of the variables sex of student or ethnicity of counselor on
student ratings of counselor expertness.

b. There will be no significant effects of the variables sex of student or ethnicity of counselor on student ratings of counselor attractiveness.

c. There will be no significant effects of the variables sex of student or ethnicity of counselor on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of sex of student and counselor ethnicity.

Sex of Student and Sex of Counselor

Hypothesis 2: Native American students' perceptions of counselors' effectiveness will not be affected by the sex of the student or the sex of the counselor.

a. There will be no significant effects of sex of student or sex of counselor on student ratings of counselor expertness.

b. There will be no significant effects of sex of student or sex of counselor on student ratings of counselor attractiveness.

c. There will be no significant effects of sex of student or sex of counselor on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of sex of student and sex of counselor.
Sex of Student and Counselor Place of Work

Hypothesis 3: Native American students' perceptions of counselor effectiveness will not be affected by sex of student or counselor place of work.

a. There will be no significant effects of sex of student or counselor place of work on student ratings of counselor expertness.

b. There will be no significant effects of sex of student or counselor place of work on student ratings of counselor attractiveness.

c. There will be no significant effects of sex of student or counselor place of work on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of sex of student and counselor place of work.

Blood Quantum of Student and Counselor Ethnicity

Hypothesis 4: Native American students' perceptions of counselor effectiveness will not be affected by blood quantum of the student or counselor ethnicity.

a. There will be no significant effects of blood quantum of student or ethnicity of counselor on student ratings of counselor expertness.

b. There will be no significant effects of blood quantum of student or ethnicity of counselor on student ratings of counselor attractiveness.
c. There will be no significant effects of blood quantum of student or ethnicity of counselor on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of blood quantum of student and ethnicity of counselor.

Blood Quantum of Student and Sex of Counselor

Hypothesis 5: Native American students' perceptions of counselor effectiveness will be independent of blood quantum of the student and sex of the counselor.

a. There will be no significant effects of blood quantum of student or sex of counselor on student ratings of counselor expertness.

b. There will be no significant effects of blood quantum of student or sex of counselor on student ratings of counselor attractiveness.

c. There will be no significant effects of blood quantum of student or sex of counselor on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of blood quantum of student and sex of counselor.

Blood Quantum of Student and Counselor Place of Work

Hypothesis 6: Native American students' perceptions of counselor effectiveness will not be affected by blood quantum of the student or counselor place of work.
a. There will be no significant effects of blood quantum of student or counselor place of work on student ratings of counselor expertness.

b. There will be no significant effects of blood quantum of student or counselor place of work on student ratings of counselor attractiveness.

c. There will be no significant effects of blood quantum of student or counselor place of work on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of blood quantum of student and counselor place of work.

Tribe of Student and Counselor Ethnicity

Hypothesis 7: Native American students' perceptions of counselor effectiveness will not be affected by tribe of student or counselor ethnicity.

a. There will be no significant effects of tribe of student or counselor ethnicity on student ratings of counselor expertness.

b. There will be no significant effects of tribe of student or counselor ethnicity on student ratings of counselor attractiveness.

c. There will be no significant effects of tribe of student or counselor ethnicity on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a
counselor will be independent of tribe of student and counselor ethnicity.

**Tribe of Student and Sex of Counselor**

Hypothesis 8: Native American students' perceptions of counselor effectiveness will not be affected by the tribe of the student or the sex of the counselor.

a. There will be no significant effects of tribe of student or sex of counselor on student ratings of counselor expertness.

b. There will be no significant effects of tribe of student or sex of counselor on student ratings of counselor attractiveness.

c. There will be no significant effects of tribe of student or sex of counselor on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of tribe of student and sex of counselor.

**Tribe of Student and Counselor Place of Work**

Hypothesis 9: Native American students' perceptions of counselor effectiveness will not be affected by the tribe of the student or the counselor's place of work.

a. There will be no significant effects of tribe of student or counsel or place of work on student ratings of counselor expertness.

b. There will be no significant effects of tribe of
student or counselor place of work on student ratings of counselor attractiveness.

c. There will be no significant effects of tribe of student or counselor place of work on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of tribe of student and counselor place of work.

Reservation Background and Counselor Ethnicity

Hypothesis 10: Native American students' perceptions of counselor effectiveness will not be affected by the tribe of the students or the counselor's place of work.

a. There will be no significant effects of reservation background of student or counselor ethnicity on student ratings of counselor expertness.

b. There will be no significant effects of reservation background of student or counselor ethnicity on student ratings of counselor attractiveness.

c. There will be no significant effects of reservation background of student or counselor ethnicity on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of reservation background of student and counselor ethnicity.
Reservation Background and Sex of Counselor

Hypothesis 11: Native American students' perceptions of counselor effectiveness will not be affected by the reservation background of the student or the counselor's ethnicity.

a. There will be no significant effects of reservation background of student or sex of counselor on student ratings of counselor expertness.

b. There will be no significant effects of reservation background of student or sex of counselor on student ratings of counselor attractiveness.

c. There will be no significant effects of reservation background of student or sex of counselor on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of reservation background and sex of counselor.

Reservation Background and Counselor Place of Work

Hypothesis 12: Native American students' perceptions of counselor effectiveness will not be affected by the reservation background of the student or the counselor's place of work.

a. There will be no significant effects of reservation background of student or counselor place of work on student ratings of counselor expertness.

b. There will be no significant effects of
reservation background of student or counselor place of work on student ratings of counselor attractiveness.

c. There will be no significant effects of reservation background of student or counselor place of work on student ratings of counselor trustworthiness.

d. Native American students' willingness to see a counselor will be independent of reservation background and counselor place of work.

ANALYSIS OF DATA

Testing Hypotheses

To test the first three sub-hypotheses of each of Hypotheses 1-12, a two-way analysis of variance was used to determine if significant interactions among each pairing of student variable and counselor variable could be found on each of the three dependent variables, expertness, attractiveness, and trustworthiness. If no significant interaction was found, tests for main effects were employed. The fourth hypothesis of each four sub-hypotheses was tested by a chi-square test of independence.

Two way analysis of variance tests employed the AVMV (multi-variable analysis of variance with unequal number of cases) program using MSUSTAT computer statistical analysis package developed by Richard E. Lund, Montana State University, Bozeman, MT 59717 (Lund, 1983). Chi-square
tests for independence used CSQ2, a chi-square analysis of two-way contingency tables, from the same statistical analysis package.

**Level of Significance**

Null hypotheses were tested at the .05 level of confidence. This level was chosen as an acceptable compromise to guard against both type I and type II errors in rejecting or retaining a hypotheses.

**Precautions for Accuracy**

Data from questionnaires were transferred to Fortran coding forms by the investigator and were checked by a second individual. Data files were checked for accuracy again after the data were entered into the computer by the Montana State University computing center. Statistical computations were performed by the computer at Montana State University using the MSUSTAT package for statistical analysis.

**PRESENTATION OF DATA**

Sum of squares, mean squares, F-values, p-values, and residual terms for each sub-hypothesis are presented in tables in Chapter IV. The tables indicate significant main effects as well as interaction effects. Group (treatment) means are presented when no interaction effect existed but main effects did exist. The results of each test are
SUMMARY

A stratified random sample of 60 Native American undergraduate students at Montana State University in Bozeman, Montana, was selected to participate in research to determine attitudes of Native American students toward counselor ethnicity, sex, and place of work. Students were assigned to groups identified by counselor ethnicity, sex, and place of work. Students viewed slides of either a male white counselor, a male Native American counselor, a female white counselor, or a female Native American counselor associated with either the counseling center or the Native American Studies program and were told that they were rating an interview made by that counselor. Female students heard a tape on which the client was a female Native American student and male students heard a tape on which the client was a male Native American student. Students then rated the counselor on the Counselor Effectiveness Rating Scale for effectiveness, trustworthiness, attractiveness, and utility. Demographical data was obtained from these students by a questionnaire administered at the time the rating was made and by a review of information available at the Native American center at Montana State University.

Data was analyzed by two-way analyses of variance and
chi-square tests for independence using the MSUSTAT computer statistical analysis package programs AVMV (multi-variable analysis of variance with unequal number of cases) and CSQ2 (chi-square analysis of two-way contingency tables). Null hypotheses were tested at the .05 level of significance. A presentation and discussion of the results follows.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to examine Native American students' perceptions of counselors and their willingness to see counselors to determine if these students' attitudes were equally favorable to counseling offered by a white or a Native American counselor, an opposite sex or same sex counselor, and a counselor employed in a counseling center or one employed in a Native American center.

The study also examined Native American students on the basis of selected demographic characteristics to determine if their perceptions of counselors were influenced by those characteristics. Students rated the effectiveness of counselors following counseling slide/audiotape sessions of various counselors, and they also indicated their willingness to go to see the counselor they rated. Demographical data obtained by a student questionnaire and through Native American Center records were used to determine if differences among students were influenced by sex, blood quantum, tribal, or reservation characteristics of the student.

The results of the statistical analyses of the data
obtained from those procedures are presented in this chapter. Descriptive statistics of the population and of the sample precede the reporting of the statistical analyses.

DESCRIPTION OF POPULATION AND SAMPLE

Population

As Tables 1 and 2 show, the undergraduate Native American student population at Montana State University numbered 125 winter quarter, 1983; 57 male and 68 female students. Of this number, 43% were freshmen, 24% sophomores, 21% juniors, and 12% seniors. This representation varies slightly from the Montana State

Table 1

Comparison of Percentages of Native American Students to All Students by Class, Winter Quarter 1983

<table>
<thead>
<tr>
<th>Class</th>
<th>Native American Students</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>43%</td>
<td>35%</td>
</tr>
<tr>
<td>Sophomores</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>Juniors</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Seniors</td>
<td>12%</td>
<td>20%</td>
</tr>
</tbody>
</table>
University undergraduate population as a whole. The two main differences between the percentages of Native American students in each class and the percentages of all students in each class are that (1) relatively more Native American students are freshmen and relatively fewer are seniors than the general undergraduate population and that (2) the percentage of female students is greater among Native Americans than among all students.

Table 2

Comparison of Percentages of Native American Students to All Students by Sex

<table>
<thead>
<tr>
<th>Sex</th>
<th>Native American Students</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>46%</td>
<td>58%</td>
</tr>
<tr>
<td>Female</td>
<td>54%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Students at Montana State University can enroll in programs provided in six colleges and two schools: the Colleges of Engineering, Letters and Science, Arts and Architecture, Agriculture, and Education and the Schools of Business and Nursing. A two-year General Studies program exists for students who have not yet selected a major. A comparison of percentages of students enrolled by college is presented in Table 3.
Table 3
A Comparison of Native American Students to All Students by College Program

<table>
<thead>
<tr>
<th>College</th>
<th>Native American Students</th>
<th>All Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>12%</td>
<td>27%</td>
</tr>
<tr>
<td>Letters and Science</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Business</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Arts and Architecture</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Education</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Nursing</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>General Studies</td>
<td>23%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The greatest differences between the representation of the general student and Native American populations in these programs is that relatively fewer Native Americans are enrolled in the College of Engineering and considerably more are enrolled in the General Studies program than the general undergraduate population.

Sample
The sixty Native American students who participated in the study were selected by a stratified random sampling
procedure that insured proportional representation by sex, college major, and year in school. Other characteristics of the sample group; home reservation, blood quantum,

Table 4

Reservations Represented by Native American Students in Sample

<table>
<thead>
<tr>
<th>Reservation</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackfoot</td>
<td>19</td>
<td>32%</td>
</tr>
<tr>
<td>Crow</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Cheyenne</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Turtle Mountain</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Fort Belknap</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>Flathead</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Fort Peck</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Rocky Boy</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Pine Ridge</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Chippewa</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Navajo</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>White Earth</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>

tribal affiliation, kind of pre-college education, and on or off reservation life, are shown in Tables 4-8.
### Table 5

**Blood Quantum of Native American Students in Sample**

<table>
<thead>
<tr>
<th>Blood Quantum</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>*50% or less</td>
<td>24</td>
<td>40%</td>
</tr>
<tr>
<td>51% to 75%</td>
<td>20</td>
<td>33%</td>
</tr>
<tr>
<td>76% to 100%</td>
<td>16</td>
<td>27%</td>
</tr>
</tbody>
</table>

*With one exception, all of these students had at least 25% Indian blood.

### Table 6

**Native American Tribes Represented in Sample**

<table>
<thead>
<tr>
<th>Tribe</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crow</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Chippewa-Cree</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Blackfoot</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>Assiniboine</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>Northern Cheyenne</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>Salish-Kootenai</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Sioux</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>Navajo</td>
<td>1</td>
<td>2%</td>
</tr>
</tbody>
</table>
Table 7
Pre-college Education of Native American Students in Sample

<table>
<thead>
<tr>
<th>Education</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public School</td>
<td>56</td>
<td>93%</td>
</tr>
<tr>
<td>Federal School</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Church School</td>
<td>2</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 8
On or Off Reservation Background of Students in Sample

<table>
<thead>
<tr>
<th>Reservation</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>41</td>
<td>68%</td>
</tr>
<tr>
<td>Off</td>
<td>19</td>
<td>32%</td>
</tr>
</tbody>
</table>

QUESTIONNAIRE RESPONSES

Of the 60 students in the sample, 41 (68%) responded that they would be willing to see the counselor that they rated. Percentages of students willing to see the
counselor and the counselor variables are presented in Table 9.

Table 9

Native American Students Willing to See Counselors by Counselor Type

<table>
<thead>
<tr>
<th>Counselor Type</th>
<th>Willing</th>
<th>Not Willing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female, Native American, Native American Center</td>
<td>10 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Female, Native American, Counseling Center</td>
<td>8 (80%)</td>
<td>2 (20%)</td>
</tr>
<tr>
<td>Female, White, Counseling Center</td>
<td>5 (50%)</td>
<td>5 (50%)</td>
</tr>
<tr>
<td>Male, Native American, Native American Center</td>
<td>8 (80%)</td>
<td>2 (20%)</td>
</tr>
<tr>
<td>Male, Native American, Counseling Center</td>
<td>7 (70%)</td>
<td>3 (30%)</td>
</tr>
<tr>
<td>Male, White, Counseling Center</td>
<td>3 (30%)</td>
<td>7 (70%)</td>
</tr>
</tbody>
</table>

Counselors were categorized as one of six different counselor types: (1) Native American female counselor associated with a Native American center, (2) Native American female counselor associated with a counseling center, (3) white female counselor associated with a counseling center, (4) Native American male counselor
associated with a Native American center, (5) Native American male counselor associated with a counseling center, and (6) white male counselor associated with a counseling center. Large variations appear in students' responses to the question "Is this counselor someone you would see if you had a problem?"

Of the students who rated a female Native American working at a Native American center, 100% indicated that this counselor was someone they would be willing to see. By contrast, only 30% of those who rated a male white counselor who worked at a counseling center were willing to see that counselor. Eighty percent would see the counselor they believed to be a male Native American working at the Native American center and 70% would see the counselor they believed to be a male Native American working at the counseling center. For the other two female counselors, 80% of the students were willing to see the female Native American counselor at the counseling center but only 50% were willing to see the female white counselor at the counseling center. The numbers of male and female students who rated counselors were approximately equal in each of the six cases, as Table 10 illustrates.
Table 10
Sex of Students Who Rated Each Counselor Type

<table>
<thead>
<tr>
<th>Counselor Type</th>
<th>Willingness Male Raters</th>
<th>Willingness Female Raters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Female, Native American, Native American Center</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Female, Native American, Counseling Center</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Female, White, Counseling Center</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Male, Native American, Native American Center</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Male, Native American, Counseling Center</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Male, White, Counseling Center</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Statistical Analysis of Data

Each hypothesis, with four sub-hypotheses, associated each of the three summed rating scores (dependent variables of expertness, attractiveness, and trustworthiness) with one counselor independent variable (ethnicity, sex, or place of work) and one student independent variable (sex, blood quantum, tribe, or reservation background) and also
related the student's willingness to see the counselor he or she had just rated, another dependent variable, to the same counselor and student variables.

The first three hypotheses of each group of four were tested by using the AVMV program of MSUSTAT, an analysis of variance test for multi-variable designs which allows for an unequal number of cases per treatment combination in a random design. AVMV uses the method of "unweighted means" (Snedecor & Cochran, p. 418) to account for unequal cell counts. Snedecor and Cochran's formula obtains the sum of squares by subtracting the sums of squares for factors from the total sum of squares. Calculation of the F-ratio uses the residual mean square as the denominator.

The fourth hypothesis in each group of four was tested with the CSQ2 program of MSUSTAT and uses Snedecor and Cochran's (Ch. 11) chi square test for independence for a two-way contingency table using the formula

\[ \text{Chi square} = \sum \frac{(f_{ij} - \bar{f}_{ij})^2}{\bar{f}_{ij}} \]

where \( f_{ij} \) is the sample count for the \( ij \)th cell and \( \bar{f}_{ij} \) is the sum of counts for the \( i \)th row multiplied by the sum of counts for the \( j \)th column divided by the overall sum of
counts. A continuity correction of 0.5 was applied to the 2 x 2 table, thus approximating a Fisher's Exact Test (Lund, 1983).

Sex of Student and Counselor Ethnicity

Hypothesis I: Native American students' perceptions of a counselor's effectiveness will not be affected by the sex of the student or the ethnicity of the counselor.

Hypothesis I examined the effects of sex of student and ethnicity of the counselor on the dependent variable rating scores of counselor expertness, attractiveness, trustworthiness, and willingness to see the counselor.

Expertness.

HoI(a): There will be no significant effect of the variables sex of student and ethnicity of counselor on student ratings of counselor expertness.

As Table 11 illustrates, a 2 x 2 analysis of variance showed no interaction between sex and ethnicity. Tests for main effects found no significant effect for the sex of student factor. A significant effect was found, however, for the ethnicity factor, with F(1,60) = 27.74, p < 0.000, and HoI(a) was rejected. Inspection of treatment means revealed that Native American counselors were rated as more expert by the Native American students than non-Native American counselors were.
Table 11
Analysis of Variance for Sex
of Student, Ethnicity,
and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>.0940</td>
<td>.0940</td>
<td>.2234</td>
<td>.6383</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>11.67</td>
<td>11.67</td>
<td>27.74</td>
<td>0.000*</td>
</tr>
<tr>
<td>Sex x ethnicity</td>
<td>1</td>
<td>.2435</td>
<td>.2435</td>
<td>.5788</td>
<td>.4500</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>23.56</td>
<td>.4206</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>2</td>
<td>18.32</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>2</td>
<td>14.90</td>
</tr>
</tbody>
</table>

Attractiveness.

H01(b): There will be no significant effects for the variables sex of student and ethnicity of counselor on student ratings of counselor attractiveness.

No interaction between sex and ethnicity was found in a 2 x 2 analysis of variance. Tests for main effects showed no significant effect by sex of student; ratings of counselor attractiveness were not affected by the sex of
Table 12
Analysis of Variance for Sex of Student, Ethnicity, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>.0018</td>
<td>.0018</td>
<td>.0028</td>
<td>.9583</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>10.44</td>
<td>10.44</td>
<td>16.38</td>
<td>0.000*</td>
</tr>
<tr>
<td>Sex x ethnicity</td>
<td>1</td>
<td>.1169</td>
<td>.1169</td>
<td>.1834</td>
<td>.6701</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>35.69</td>
<td>.6373</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>2</td>
<td>18.08</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>2</td>
<td>14.85</td>
</tr>
</tbody>
</table>

the student raters. A significant effect was found, however, in ratings of counselor attractiveness with $F(1,60) = 16.38$, $p < 0.000$, so $H_0(b)$ was rejected. Examination of treatment means determined that students rated Native American counselors as more attractive than non-Native American counselors. Results are shown in Table 12.
Trustworthiness:

H01(c): There will be no significant effects of the variables sex of student and ethnicity of counselor on student ratings of counselor trustworthiness.

There was no significant interaction between sex and ethnicity discerned by a 2 x 2 analysis of variance. Tests for main effects determined that there was no significant effect for the sex of student variable, but there was a significant effect produced by the ethnicity factor, F(1,69) = 26.62, p < 0.000. Hypothesis 1(c) was rejected; results are shown in Table 13. Treatment means indicated that students rated Native American counselors as more trustworthy than non-Native American counselors, although the sex of the student did not influence the students' ratings.

Willingness to see counselor.

H01(d): Native American students' willingness to see a counselor will be independent of sex of student and counselor ethnicity.

A 2 x 2 chi square test of independence for the variables of sex of student and counselor ethnicity showed no significant dependence for these variables among students who indicated willingness to see a counselor. Hypothesis 1(d) was retained; the results of these tests are illustrated in Table 14.
Table 13
Analysis of Variance for Sex of Student, Ethnicity, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>.0242</td>
<td>.0242</td>
<td>.0460</td>
<td>.8310</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>14.02</td>
<td>14.02</td>
<td>26.63</td>
<td>0.000*</td>
</tr>
<tr>
<td>Sex x ethnicity</td>
<td>1</td>
<td>.0020</td>
<td>.0020</td>
<td>.0037</td>
<td>.9514</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>29.48</td>
<td>.5265</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>2</td>
<td>18.44</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>2</td>
<td>14.70</td>
</tr>
</tbody>
</table>
Table 14
Chi Square Test of Independence for Sex of Student, Ethnicity, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Ethnicity</td>
</tr>
<tr>
<td>NA  non-NA</td>
<td></td>
</tr>
<tr>
<td>Male 14  4</td>
<td>Male 15  3</td>
</tr>
<tr>
<td>Female 21  3</td>
<td>Female 20  4</td>
</tr>
</tbody>
</table>

Chi square (1 df) = .1750
P-value = .6757

No interaction of sex of student and ethnicity of counselor was found for any of the three student rating scores, expertness, attractiveness, and trustworthiness, nor were sex of student and ethnicity of counselor found to have an effect on the student's willingness to see the counselor. The ethnicity factor was found to be significant, however, for all three rating scores. In all three cases, students rated Native American counselors higher than non-Native American counselors.
Sex of Student and Sex of Counselor

Hypothesis 2: Native American students' perceptions of counselors' effectiveness will not be affected by the sex of the student or the sex of the counselor.

The next hypothesis, $H_02$, defines the effects of the two variables sex of student and sex of counselor on the rating scale concepts of expertness, attractiveness, and trustworthiness and on students' indication of willingness to see the counselor.

**Expertness.**

$H_02(a)$: There will be no significant effects of sex of student and sex of counselor on student ratings of counselor expertness.

A 2 x 2 analysis of variance revealed no interaction between sex of student and sex of counselor, as shown in Table 15. Analysis for the main effects did not reveal

Table 15
Analysis of Variance for Sex of Student, Sex of Counselor, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (student)</td>
<td>1</td>
<td>.0001</td>
<td>.0001</td>
<td>.0001</td>
<td>.9905</td>
</tr>
<tr>
<td>Sex (counselor)</td>
<td>1</td>
<td>.1474</td>
<td>.1474</td>
<td>.2623</td>
<td>.6106</td>
</tr>
<tr>
<td>Sex x sex</td>
<td>1</td>
<td>.0670</td>
<td>.0670</td>
<td>.1193</td>
<td>.7311</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>.31.47</td>
<td>.5620</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a significant effect for either sex of student or sex of counselor. Students did not rate male and female counselors differently on the expertness dimension of the Counselor Effectiveness Rating Scale. Ho2(a) was therefore retained.

Attractiveness.

Ho2(b): There will be no significant effect of sex of student or sex of counselor on student ratings of trustworthiness.

For the factors sex of student and sex of counselor, no significant interaction was indicated by a 2 x 2 analysis of variance (Table 16). Main effects were not found for either the first factor, sex of student, nor for the second, sex of counselor. Male and female counselors

Table 16
Analysis of Variance for Sex of
Student, Sex of Counselor, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (student)</td>
<td>1</td>
<td>.0894</td>
<td>.0894</td>
<td>.1267</td>
<td>.7233</td>
</tr>
<tr>
<td>Sex (counselor)</td>
<td>1</td>
<td>1.177</td>
<td>1.177</td>
<td>.1666</td>
<td>.2021</td>
</tr>
<tr>
<td>Sex x sex</td>
<td>1</td>
<td>.5965</td>
<td>.5965</td>
<td>.8444</td>
<td>.3621</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>39.56</td>
<td>.7064</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
were not rated differently on the attractiveness concept of the Counselor Effectiveness Rating Scale, so Ho2(b) was retained.

Trustworthiness.

Ho2(c): There will be no significant effects of sex of student or sex of counselor on student ratings of counselor trustworthiness.

Variables sex of student and sex of counselor showed no significant interaction on student ratings of trustworthiness in a 2 x 2 analysis of variance (Table 17). Tests for main effects showed no significant effect by either sex of student or sex of counselor; Ho2(c) was consequently retained. Male and female students did not rate male and female counselors differently.

Table 17
Analysis of Variance for Sex of Student, Sex of Counselor, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (student)</td>
<td>1</td>
<td>.0949</td>
<td>.0949</td>
<td>.1436</td>
<td>.7062</td>
</tr>
<tr>
<td>Sex (counselor)</td>
<td>1</td>
<td>1.551</td>
<td>1.551</td>
<td>2.348</td>
<td>.1311</td>
</tr>
<tr>
<td>Sex x Sex</td>
<td>1</td>
<td>.1005</td>
<td>.1005</td>
<td>.1520</td>
<td>.6981</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>37.01</td>
<td>.6608</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Willingness to see counselor.

Ho2(d): Native American students' willingness to see a counselor will be independent of sex of student and sex of counselor.

No significant relationship was found between the variables of sex of student and sex of counselor in a 2 x 2 chi square test of independence for indication of willingness to see a counselor (Table 18). Ho2(d) was retained. Student willingness to see the counselor was not dependent on the sex of the student or the sex of the counselor.

Table 18
Chi Square Test of Independence for Sex of Student, Sex of Counselor and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Observed frequencies</th>
<th>Expected frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex of Student</strong></td>
<td><strong>Sex of Counselor</strong></td>
</tr>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
</tr>
<tr>
<td>Chi square (1 df)</td>
<td>.05006</td>
</tr>
<tr>
<td>P-value</td>
<td>.8230</td>
</tr>
</tbody>
</table>
Significant effects were not produced by the interaction of sex of student and sex of counselor on ratings of expertness, attractiveness, trustworthiness, and willingness to see the counselor. No significant main effects were produced by sex of student or sex of counselor. Students responded similarly to the counselors regardless of which sex student or which sex counselor was considered. Hypothesis 2 was retained.

**Sex of Student and Counselor Place of Work**

Hypothesis 3: Native American students' perceptions of a counselor's effectiveness will not be affected by sex of student or counselor place of work.

Tests of the next hypothesis, Ho3, examined effects of sex of student and counselor place of work variables on ratings of counselor expertness, attractiveness, trustworthiness, and willingness to see the counselor.

**Expertness.**

Ho3(a): There will be no significant effect of sex of student or counselor place of work on student ratings of counselor expertness.

No significant interaction between sex of student and counselor place of work was found in a 2 x 2 analysis of variance of students' ratings of counselor expertness. Tests for main effects showed no evidence of an effect by sex of student but a significant effect by counselor place of work was indicated by an F-value (1,60) = 5.691, p-value = .0204. Sex of the student rater was not found to
affect the ratings of the counselor's expertness, but the place the counselor worked did affect ratings; $H_03(a)$ was therefore rejected. Inspection of factor means indicated that students' rated counselors employed in a Native American center more highly in expertness than they did counselors employed in a counseling center. Results of these tests are illustrated in Table 19.

Table 19
Analysis of Variance for Sex of Student, Place of Work, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>.0167</td>
<td>.0167</td>
<td>.0291</td>
<td>.8650</td>
</tr>
<tr>
<td>Place of Work</td>
<td>1</td>
<td>3.255</td>
<td>3.255</td>
<td>5.691</td>
<td>.0204*</td>
</tr>
<tr>
<td>Sex x Place of work</td>
<td>1</td>
<td>.6875</td>
<td>.6875</td>
<td>1.202</td>
<td>.2776</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>32.03</td>
<td>.5720</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05

Treatment Means

<table>
<thead>
<tr>
<th>Factor</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of student</td>
<td>2</td>
<td>16.55</td>
</tr>
<tr>
<td>Place of work</td>
<td>2</td>
<td>18.35</td>
</tr>
</tbody>
</table>
Attractiveness.

Ho3(b): There will be no significant effects of sex of student or counselor place of work on student ratings of counselor attractiveness.

A 2 x 2 analysis of variance disclosed no significant interaction between sex of student and counselor place of work for student ratings of counselor attractiveness (Table 20). Tests for main effects showed neither the sex of student variable nor the counselor place of work variable to be significant, and Ho3(b) was retained. Counselor attractiveness was not rated differently by male or female students nor was it rated differently for counselors who worked at a counseling center than for ones who worked at a Native American center.

Table 20
Analysis of Variance for Sex of Student, Place of Work, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>.0469</td>
<td>.0469</td>
<td>.0578</td>
<td>.8109</td>
</tr>
<tr>
<td>Place of Work</td>
<td>1</td>
<td>1.868</td>
<td>1.868</td>
<td>2.299</td>
<td>.1351</td>
</tr>
<tr>
<td>Sex x place of work</td>
<td>1</td>
<td>.0136</td>
<td>.0136</td>
<td>.0168</td>
<td>.8975</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>45.50</td>
<td>.8124</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trustworthiness.

Ho3(c): There will be no significant effects of sex of student or counselor place of work on student ratings of counselor trustworthiness.

Table 21 illustrates that no significant interaction of sex of student and counselor place of work on ratings of trustworthiness was found in a 2 x 2 analysis of variance. Tests for main effects showed no significant effect for either sex of student nor for counselor place of work. Students ratings of counselors were the same whether counselors worked at the counseling center or at a Native American center. Ho3(c) was retained.

Table 21
Analysis of Variance for Sex of Student, Place of Work, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1</td>
<td>.1438</td>
<td>.1438</td>
<td>.1917</td>
<td>.6632</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>1.972</td>
<td>1.972</td>
<td>2.629</td>
<td>.1105</td>
</tr>
<tr>
<td>Sex x place of work</td>
<td>1</td>
<td>.3354</td>
<td>.3354</td>
<td>.4473</td>
<td>.5064</td>
</tr>
<tr>
<td>Residual</td>
<td>56</td>
<td>41.99</td>
<td>.7499</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Willingness to see counselor.

Ho3(d): Native American students' willingness to see a counselor will be independent of sex of student and counselor place of work.

A 2 x 2 chi square test for independence found no significant effects for sex of student or counselor place of work on indication of willingness to see a counselor (Table 22), Ho3(d) was therefore retained. Students' indication of willingness to see a counselor was not influenced by either the sex of the student rater or the place of work, Native American center or counseling center, with which the counselor was associated.

Table 22
Chi Square Test of Independence for Sex of Student, Place of Work, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Sex</th>
<th>Place of Work</th>
<th>Observed Frequencies</th>
<th>Sex</th>
<th>Place of Work</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAC</td>
<td>CC</td>
<td></td>
<td>NAC</td>
<td>CC</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>11</td>
<td>Male</td>
<td>7.7</td>
<td>10.3</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>13</td>
<td>Female</td>
<td>10.3</td>
<td>13.7</td>
</tr>
</tbody>
</table>

Chi square (1df) = .0182
P-value = .8926
Of the four tests for effects of sex of student and counselor place of work on expertness, attractiveness, trustworthiness, and willingness to see the counselor, all but one found no significant effects. The first test, a 2 x 2 analysis of variance of sex of student, counselor place of work, and counselor expertness, showed a significant effect for place of work on student ratings of expertness. Counselors who worked at a Native American center were perceived as more expert than counselors who worked at a counseling center. Ho3 was rejected.

**Blood Quantum and Counselor Ethnicity**

Hypothesis 4: Native American students' perceptions of a counselor's effectiveness will not be affected by blood quantum of the student nor counselor ethnicity.

The effects of the variables blood quantum and counselor ethnicity on counselor expertness, attractiveness, trustworthiness, and willingness to see the counselor were determined by tests on the next hypothesis, Ho4.

**Expertness.**

Ho4(a): There will be no significant effects of blood quantum of student or ethnicity of counselor on student ratings of counselor expertness.

An analysis of variance (3 x 2) found no interaction between student blood quantum and counselor ethnicity for ratings of expertness (Table 23). Tests for main effects proved blood quantum to have no effect on ratings of counselor expertness, but established that counselor
ethnicity did have a significant effect, $F(1, 60) = 24.73$, $p < 0.000$; $H_04(a)$ was therefore rejected. Treatment means indicated students rated Native American counselors as more expert than non-Native American counselors.

Table 23
Analysis of Variance for Blood Quantum, Ethnicity, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>2.537</td>
<td>1.269</td>
<td>2.046</td>
<td>.1372</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>15.34</td>
<td>15.34</td>
<td>24.73</td>
<td>0.000*</td>
</tr>
<tr>
<td>Blood quantum x ethnicity</td>
<td>2</td>
<td>2.844</td>
<td>1.422</td>
<td>2.293</td>
<td>.1088</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>33.48</td>
<td>.6201</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>3</td>
<td>18.19</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>3</td>
<td>15.00</td>
</tr>
</tbody>
</table>

Attractiveness.

$H_04(b)$: There will be no significant effects of blood quantum of student or ethnicity of counselor on
student ratings of counselor attractiveness.

No interaction between blood quantum and counselor ethnicity for ratings of attractiveness was found in a $3 \times 2$ analysis of variance (Table 24). Blood quantum did not produce a significant effect for attractiveness ratings in tests for main effects, indicating that students of high,

Table 24
Analysis of Variance for Blood Quantum, Ethnicity, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Quantum</td>
<td>2</td>
<td>0.9384</td>
<td>0.4692</td>
<td>0.4610</td>
<td>0.6388</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>15.05</td>
<td>15.05</td>
<td>14.78</td>
<td>0.000*</td>
</tr>
<tr>
<td>Blood quantum x ethnicity</td>
<td>2</td>
<td>0.6869</td>
<td>0.3434</td>
<td>0.3374</td>
<td>0.7200</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>54.96</td>
<td>1.018</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>3</td>
<td>18.09</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>3</td>
<td>14.92</td>
</tr>
</tbody>
</table>
medium and low blood quantum did not rate counselors differently. Ethnicity of counselor did produce a significant effect in main effect tests, however, \( F(1,60) = 24.73, p < 0.000 \), so Ho4(b) was rejected. Examination of means indicated that students rated Native American counselors as more attractive than non-Native American counselors.

**Trustworthiness.**

Ho4(c): There will be no significant effects of blood quantum of student or ethnicity of counselor on student ratings of counselor trustworthiness.

Blood quantum and counselor ethnicity were not found to interact significantly on student ratings of counselor trustworthiness in a 3 x 2 analysis of variance, shown in Table 25. Main effects tests showed a significant effect produced by the blood quantum factor on ratings of trustworthiness, \( F(2,60) = 3.604, p = .0330 \). Post-hoc comparisons of means by the Scheffe method, alpha = .05, (Nie, Hadlai Hull, Jenkins, Steinbrenner, & Bent, 1975) showed the mean for medium blood quantum to be significantly different from both of the other two means. Counselor ethnicity was also found to be a significant factor in tests for main effects, \( F(2,60) = 23.49, p < 0.000 \). Examination of treatment means established that Native American counselors were rated as more trustworthy than non-Native American counselors and medium blood quantum student rated Native American counselors higher.
than the other two blood quantum groups. Ho4(c) was rejected.

Table 25
Analysis of Variance for Blood Quantum, Ethnicity, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>5.380</td>
<td>2.690</td>
<td>3.604</td>
<td>.0330*</td>
</tr>
<tr>
<td>Counselor ethnicity</td>
<td>1</td>
<td>17.61</td>
<td>17.61</td>
<td>23.59</td>
<td>.000*</td>
</tr>
<tr>
<td>Blood quantum x counselor</td>
<td>2</td>
<td>4.338</td>
<td>2.169</td>
<td>2.906</td>
<td>.0617</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>40.30</td>
<td>.7464</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Treatment Means

<table>
<thead>
<tr>
<th>Blood quantum</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2</td>
<td>15.81</td>
</tr>
<tr>
<td>Medium</td>
<td>2</td>
<td>18.00*</td>
</tr>
<tr>
<td>High</td>
<td>2</td>
<td>16.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>3</td>
<td>18.40</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>3</td>
<td>14.97</td>
</tr>
</tbody>
</table>

*Significant at alpha = .05
Willingness to see counselor.

Ho4(d): Native American students' willingness to see a counselor will be independent of blood quantum of student and ethnicity of counselor.

A chi square test of independence applied to Ho4(d) found no significant effect on student willingness to see the counselor by either blood quantum or counselor ethnicity. Students with high, medium, and low amounts of Indian blood were equally willing to see Native American and non-Native American counselors. Ho4(d) was retained. Results of this test are illustrated in Table 26.

Tests of hypotheses for the blood quantum of student and counselor ethnicity independent variable effects on dependent variables expertness, attractiveness, trustworthiness, and willingness to see the counselor found no interaction of the independent variables on the dependent. Main effects were found for ethnicity on expertness, attractiveness, and trustworthiness and for blood quantum on trustworthiness. Again, students rated Native American counselors as more expert, attractive, and trustworthy than non-Native American counselors and students with medium blood quantum rated counselors' trustworthiness higher than students with either high or low blood quantum. Ho4 was rejected.
Table 26
Chi Square Test of Independence for Blood Quantum, Ethnicity, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Blood Quantum</th>
<th>Ethnicity</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td>non-NA</td>
<td>NA</td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
<td>3</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>11</td>
<td>3</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>7</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>2.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi square (1 df) = .6788
P-value = .7175

Blood Quantum and Sex of Counselor

Hypothesis 5: Native American students' perceptions of counselor effectiveness will not be affected by blood quantum of the student or sex of the counselor.

The next four sub-hypotheses tested the blood quantum and sex of counselor effects on the expertness, attractiveness, trustworthiness, and willingness to see the counselor variables. Analysis of variance and a chi square test of independence were used to determine if significant effects occurred.
Expertness.

Ho5(a): There will be no significant effects of blood quantum of student or sex of counselor on student ratings of counselor expertness.

A 3 x 2 analysis of variance for Ho5(a) determined that there was no interaction of blood quantum and sex of counselor on ratings of counselor expertness, as Table 27 illustrates. No main effects were produced by either blood quantum or sex of counselor, so Ho5(a) was retained. Students rated both sexes of counselors as equally expert; students of low, medium, and high blood quantums did not rate counselors' expertness differently.

Table 27
Analysis of Variance for Blood Quantum, Sex of Counselor, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>2.513</td>
<td>1.257</td>
<td>1.481</td>
<td>.2351</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.4141</td>
<td>.4141</td>
<td>.4882</td>
<td>.4877</td>
</tr>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>.7793</td>
<td>.3897</td>
<td>.4593</td>
<td>.6398</td>
</tr>
<tr>
<td>x sex</td>
<td>2</td>
<td>45.81</td>
<td>8483</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attractiveness.

Ho5(b): There will be no significant effects of blood quantum of student or sex of counselor on student ratings of counselor attractiveness.

Using a 3 x 2 analysis of variance to test Ho5(b), no significant interaction effect of blood quantum and sex of counselor was found on ratings of counselor expertness (Table 28). Tests for main effects did not find any significant effects by either blood quantum or sex of counselor. Ho5(b) was retained. Students rated male and female counselors as equally attractive, and their ratings of the counselor's attractiveness were not different for students of low, medium, or high blood quantum.

Table 28
Analysis of Variance for Blood Quantum, Sex of Counselor, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>3.098</td>
<td>1.549</td>
<td>1.441</td>
<td>.2444</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>1.494</td>
<td>1.494</td>
<td>1.390</td>
<td>.2436</td>
</tr>
<tr>
<td>Blood quantum x sex</td>
<td>2</td>
<td>1.484</td>
<td>.7420</td>
<td>.6905</td>
<td>.5101</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>58.03</td>
<td>1.075</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trustworthiness.

Ho5(c): There will be no significant effect of blood quantum of student or sex of counselor on student ratings of counselor trustworthiness.

No significant interaction of blood quantum and sex of counselor on ratings of counselor trustworthiness was found in a $3 \times 2$ analysis of variance. Table 29 illustrates the results of the analysis. No main effects were produced by either blood quantum or sex of counselor. Counselors were rated equally attractive whether male or female. Nor did attractiveness ratings depend on the amount of Indian blood students had. Ho5(c) was retained.

Table 29
Analysis of Variance for Blood Quantum, Sex of Counselor, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>4.344</td>
<td>2.172</td>
<td>2.214</td>
<td>.1172</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>2.622</td>
<td>2.622</td>
<td>2.672</td>
<td>.1079</td>
</tr>
<tr>
<td>Blood quantum x sex</td>
<td>2</td>
<td>.5781</td>
<td>.2891</td>
<td>.2946</td>
<td>.7501</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>52.98</td>
<td>.9811</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Willingness to see counselor.

Ho5(d): Native American students' willingness to see a counselor will be independent of blood quantum of student and sex of counselor.

A two-way chi square test of independence found willingness to see a counselor was not dependent on either the blood quantum or sex of counselor variables, as can be seen in Table 30; Ho5(d) was therefore retained. Students' indication of willingness to see the counselor was not affected by whether the student had high, medium, or low percentages of Indian blood nor by whether the counselor was male or female.

Table 30
Chi Square Test of Independence for Blood Quantum, Sex of Counselor, and Willingness to See Counselor.

<table>
<thead>
<tr>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Quantum Sex</td>
<td>Blood Quantum Sex</td>
</tr>
<tr>
<td></td>
<td>Male Female</td>
</tr>
<tr>
<td>Low</td>
<td>7 11</td>
</tr>
<tr>
<td></td>
<td>8.1 9.9</td>
</tr>
<tr>
<td>Medium</td>
<td>7 7</td>
</tr>
<tr>
<td></td>
<td>6.3 7.7</td>
</tr>
<tr>
<td>High</td>
<td>5 5</td>
</tr>
<tr>
<td></td>
<td>4.5 5.5</td>
</tr>
</tbody>
</table>

\[ \chi^2 (1 \ df) = .5126 \]

\[ P-value = .7775 \]
All four null hypotheses for effects of blood quantum and sex of counselor were retained. There was no significant interaction of blood quantum and sex of counselor variables on ratings of expertness, attractiveness, and trustworthiness. Willingness to see the counselor was not dependent on those variables. Ho5 was retained.

Blood Quantum and Counselor Place of Work

Hypothesis 6: Native American students' perceptions of counselor effectiveness will not be affected by blood quantum of student or counselor place of work.

Results of tests for effects of the blood quantum and place of work variables, the next hypothesis (Ho6), are reported below. Analysis of variance and a chi square test of independence determined effects of blood quantum and place of work on ratings of expertness, attractiveness, and trustworthiness and on indications of willingness to see the counselor.

Expertness.

Ho6(a): There will be no significant effects of blood quantum of student or counselor place of work on student ratings of counselor expertness.

Ho6(a) was retained. A 2 x 2 analysis of variance found no significant interaction of blood quantum and place of work, as Table 31 shows. Tests for main effects found no significant effect created by either the blood quantum or place of work variables. Students' ratings of the counselor's expertness were not influenced by low, medium,
nor high percentages of Indian blood in the student nor by whether the counselor worked at a Native American center or a counseling center.

Table 31
Analysis of Variance for Blood Quantum, Place of Work, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>4.002</td>
<td>2.001</td>
<td>2.126</td>
<td>.1272</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>2.833</td>
<td>2.833</td>
<td>3.010</td>
<td>.0884</td>
</tr>
<tr>
<td>Blood quantum x place of work</td>
<td>2</td>
<td>3.443</td>
<td>1.721</td>
<td>1.829</td>
<td>.1686</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>50.82</td>
<td>.9412</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attractiveness.

**H06(b):** There will be no significant effects of blood quantum of student or counselor place of work on student ratings of counselor attractiveness.

3 x 2 analysis of variance found no significant interaction of blood quantum and place of work on ratings of attractiveness. Tests for main effects found no effect by either blood quantum or place of work; thus H06(b) was retained. Student ratings of the counselor's attractiveness were not influenced by the amount of Indian
blood of the student nor by whether the counselor worked at a counseling center or a Native American center.

Table 32

Analysis of Variance for Blood Quantum, Place of Work, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>2.561</td>
<td>1.280</td>
<td>.9155</td>
<td>.4090</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>2.237</td>
<td>2.237</td>
<td>1.600</td>
<td>.2114</td>
</tr>
<tr>
<td>Blood quantum x place of work</td>
<td>2</td>
<td>.1066</td>
<td>.0532</td>
<td>.0381</td>
<td>.9629</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>75.52</td>
<td>1.399</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trustworthiness.

Ho6(c): There will be no significant effects of blood quantum of student or counselor place of work on student ratings of counselor trustworthiness.

Since a 2 x 2 analysis of variance found no significant interaction of blood quantum and counselor place of work variables, and tests for main effects revealed no effect by either blood quantum or counselor place of work; Ho6(b) was retained. Students' ratings of the counselor's trustworthiness were not affected by the students' Indian blood. Ratings were not affected by whether the counselor worked at a counseling center or a
Native American center. Results of this test are shown in Table 33.

Table 33
Analysis of Variance for Blood Quantum, Place of Work, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood quantum</td>
<td>2</td>
<td>4.526</td>
<td>2.263</td>
<td>1.832</td>
<td>.1681</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>1.796</td>
<td>1.796</td>
<td>1.454</td>
<td>.2332</td>
</tr>
<tr>
<td>Blood quantum x place of work</td>
<td>2</td>
<td>1.645</td>
<td>.8227</td>
<td>.6659</td>
<td>.5225</td>
</tr>
<tr>
<td>Residual</td>
<td>54</td>
<td>66.71</td>
<td>1.235</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Willingness to see counselor.

H06(d): Native American students' willingness to see a counselor will be independent of blood quantum of student and counselor place of work.

A chi square test of independence determined that indication of willingness to see the counselor was independent of blood quantum and counselor place of work; therefore, H06(d) was retained, as Table 34 illustrates. Students' willingness to see the counselor they rated was not influenced by the amount of Indian blood of the students' nor by whether the counselor was associated with a Native American center or a counseling center.
Table 34
Chi Square Test of Independence for Blood Quantum, Place of Work, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Blood Quantum</th>
<th>Place of Work</th>
<th>Blood Quantum</th>
<th>Place of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAC</td>
<td>CC</td>
<td>NAC</td>
</tr>
<tr>
<td>Low</td>
<td>9</td>
<td>9</td>
<td>Low</td>
</tr>
<tr>
<td>Medium</td>
<td>7</td>
<td>7</td>
<td>Medium</td>
</tr>
<tr>
<td>High</td>
<td>8</td>
<td>2</td>
<td>High</td>
</tr>
</tbody>
</table>

Chi square (1 df) = 2.800
P-value = .2457

None of the four sub-hypotheses for blood quantum of the student and counselor place of work effects on students' perceptions of the counselor were rejected. Students of low, medium, and high blood quantums rated counselors equally in expertness, attractiveness, and trustworthiness; they were also all equally willing to see the counselor they rated. Whether the counselor worked at a counseling center or a Native American center did not influence these students' perceptions of the counselor. Ho6 was retained.
Tribe of Student and Counselor Ethnicity

Hypothesis 7: Native American students' perceptions of counselor effectiveness will not be affected by tribe of student or counselor ethnicity.

Analysis of variance and chi square independence tests were applied to the results of student questionnaires to determine the acceptance or rejection of Hypothesis 7. The variables considered in the sub-hypotheses were the tribe of the student and the ethnicity of the counselor, independent variables, the expertness, attractiveness and trustworthiness ratings, dependent variables, and the students' indication of willingness to see the counselor, also a dependent variable.

Expertness.

$H_0^7(a)$: There will be no significant effects of tribe of student or counselor ethnicity on student ratings of counselor expertness.

No significant interaction of tribe and counselor ethnicity was found on ratings of expertness using a $5 \times 2$ analysis of variance. Tests for main effects established no significant effect for the tribe variable but did find a significant effect for the ethnicity variable, $F(1,60) = 9.061$, $p = .0044$. $H_0^7(a)$ was therefore rejected. Students from different tribes were not found to rate the counselor's expertness differently, but students did rate the counselors differently dependent on the ethnicity of the counselor. Examination of group means established that
students rated Native American counselors as more expert than non-Native American counselors.

Table 35
Analysis of Variance for Tribe, Ethnicity, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>4</td>
<td>1.950</td>
<td>.4876</td>
<td>.2566</td>
<td>.9032</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>17.22</td>
<td>17.22</td>
<td>9.061</td>
<td>.0044*</td>
</tr>
<tr>
<td>Tribe x ethnicity</td>
<td>4</td>
<td>6.411</td>
<td>1.603</td>
<td>.8434</td>
<td>.5075</td>
</tr>
<tr>
<td>Residual</td>
<td>42</td>
<td>79.82</td>
<td>1.900</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>5</td>
<td>17.97</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>5</td>
<td>15.35</td>
</tr>
</tbody>
</table>

Attractiveness.

Ho7(b): There will be no significant effects of tribe of student or counselor ethnicity on student ratings of counselor attractiveness.
Analysis of the variance (2 x 2) found no significant interaction effects for tribe of student and counselor ethnicity on ratings of the counselors' attractiveness. No main effect was produced by the tribe of student variable, but a significant effect was produced by the counselor ethnicity variable, $F(1,60) = 13.23$, $p < 0.000$, so $H_0^7(b)$ was rejected. The tribe of the student did not affect ratings of attractiveness, but the ethnicity of the counselor did. Examination of treatment means indicated that students rated Native American counselors as more attractive than non-Native American counselors. The results of these analyses appear in Table 36.

**Trustworthiness.**

$H_0^7(c)$: There will be no significant effects by tribe of student or counselor ethnicity on student ratings of counselor trustworthiness.

An analysis of variance (5 x 2) found no interaction effect of tribe of student and counselor ethnicity on ratings of counselor trustworthiness (Table 37). No main effect was produced by tribe of student, but counselor ethnicity did produce a significant effect on ratings, $F(1,60) = 17.53$, $p < 0.000$. $H_0^7(c)$ was rejected. Inspection of treatment means determined that students rated Native American counselors as more attractive than non-Native American counselors.
Table 36.
Analysis of Variance for Tribe, Ethnicity, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>4</td>
<td>7.417</td>
<td>1.854</td>
<td>.8282</td>
<td>.5166</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>29.63</td>
<td>29.63</td>
<td>13.23</td>
<td>0.000*</td>
</tr>
<tr>
<td>Tribe x ethnicity</td>
<td>4</td>
<td>14.28</td>
<td>3.570</td>
<td>1.594</td>
<td>.1927</td>
</tr>
<tr>
<td>Residual</td>
<td>42</td>
<td>94.04</td>
<td>2.239</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>5</td>
<td>18.49</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>5</td>
<td>15.05</td>
</tr>
</tbody>
</table>

Willingness to see counselor.

Ho7(d): Native American students' willingness to see a counselor will be independent of tribe of student and counselor ethnicity.
Table 37
Analysis of Variance for Tribe, Ethnicity, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>4</td>
<td>13.22</td>
<td>3.304</td>
<td>2.114</td>
<td>.0952</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>27.41</td>
<td>27.41</td>
<td>17.53</td>
<td>0.000*</td>
</tr>
<tr>
<td>Tribe x ethnicity</td>
<td>4</td>
<td>10.25</td>
<td>2.563</td>
<td>1.639</td>
<td>.1814</td>
</tr>
<tr>
<td>Residual</td>
<td>42</td>
<td>65.67</td>
<td>1.563</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>5</td>
<td>18.71</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>5</td>
<td>15.40</td>
</tr>
</tbody>
</table>

Student willingness to see a counselor was found to be independent of the tribe of student and counselor ethnicity variables. A chi square test of independence found no relationship between students' indication that they were willing to see the counselor they rated and their tribe or
the counselor's ethnicity. \( H_0(d) \) was retained. The results of this test are shown in Table 38.

Table 38

Chi Square Test of Independence for Tribe, Ethnicity, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Ethnicity</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td>non-NA</td>
<td>Tribe</td>
</tr>
<tr>
<td>Crow</td>
<td>6</td>
<td>3</td>
<td>Crow</td>
</tr>
<tr>
<td>Chippewa-Cree</td>
<td>12</td>
<td>1</td>
<td>Chippewa-Cree</td>
</tr>
<tr>
<td>Blackfoot</td>
<td>8</td>
<td>1</td>
<td>Blackfoot</td>
</tr>
</tbody>
</table>

Chi square (1 df) = 2.821

P-value = .2431

Tests for effects by the tribe of student and counselor ethnicity variable found no interaction of these on student ratings of effectiveness. A significant effect was found, in each of the three analysis of variance, of counselor ethnicity on student ratings of expertness, attractiveness, and trustworthiness. In all three instances, Native American counselors were rated more highly than non-Native American counselors. Willingness to
see the counselor was not found to be related to the student's tribe or the counselor's ethnicity in a chi square test of independence. Ho7 was rejected.

**Tribe of Student and Sex of Counselor**

Hypothesis 8: Native American students' perceptions of counselor effectiveness will not be affected by the tribe of student or the sex of counselor.

The next hypothesis, Ho8, determined the effects of the tribe of student and sex of counselor variables on the expertness, attractiveness, trustworthiness, and willingness to see the counselor variables. Analysis of variance and chi square independence tests were used. Of the 42 questionnaires indicating willingness to see the counselor, 38 were considered in the chi square test of independence, thus eliminating zero counts in any of the cells. Tribes represented were Crow, Chippewa-Cree, Blackfoot, Assiniboia, and Northern Cheyenne.

**Expertness.**

Ho8(a): There will be no significant effects of tribe of student or sex of counselor on student ratings of counselor expertness.

No interaction of tribe of student and sex of counselor was found to affect ratings of counselor expertness. No main effects for either tribe of student or sex of counselor were found. Ho8(a) was therefore retained; results of the analysis of variance applied to this hypothesis are shown in Table 39.
Table 39
Analysis of Variance for Tribe, Sex of Counselor, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>4</td>
<td>7.213</td>
<td>1.803</td>
<td>.8587</td>
<td>.4983</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>3.316</td>
<td>3.316</td>
<td>1.579</td>
<td>.2158</td>
</tr>
<tr>
<td>Tribe x sex</td>
<td>4</td>
<td>13.26</td>
<td>3.315</td>
<td>1.579</td>
<td>.1968</td>
</tr>
<tr>
<td>Residual</td>
<td>42</td>
<td>88.20</td>
<td>2.100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attractiveness.

Ho8(b): There will be no effects of tribe of student or sex of counselor on student ratings of counselor attractiveness.

Analysis of variance for effects of tribe of student and sex of counselor on ratings of attractiveness found no interaction effect for these variables. No main effects were found for either variable. Ho8(b) was retained; results of the analysis are shown in Table 40.
Table 40
Analysis of Variance for Tribe, Sex of Counselor, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>4</td>
<td>10.43</td>
<td>2.608</td>
<td>.8753</td>
<td>.4886</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.1040</td>
<td>.1040</td>
<td>.0349</td>
<td>.8527</td>
</tr>
<tr>
<td>Tribe x sex</td>
<td>4</td>
<td>6.320</td>
<td>1.580</td>
<td>.5304</td>
<td>.7169</td>
</tr>
<tr>
<td>Residual</td>
<td>42</td>
<td>125.1</td>
<td>2.979</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trustworthiness.

Ho8(c): There will be no significant effects of tribe of student or sex of counselor on student ratings of counselor trustworthiness.

No significant interaction effect of tribe of student and sex of counselor on ratings of counselor trustworthiness was found. Tests for main effects found no significant effect produced by either variable. Students rated male and female counselors as equally attractive, and ratings were not effected by the tribe to which the student belonged. Results of the analysis of variance applied to Ho8(c), which was retained, are shown in Table 41.
Table 41
Analysis of Variance for Tribe, Sex of Counselor, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>4</td>
<td>18.97</td>
<td>4.742</td>
<td>2.205</td>
<td>.0840</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.7164</td>
<td>.7164</td>
<td>.3332</td>
<td>.5669</td>
</tr>
<tr>
<td>Tribe x sex</td>
<td>4</td>
<td>6.519</td>
<td>1.630</td>
<td>.7580</td>
<td>.5606</td>
</tr>
<tr>
<td>Residual</td>
<td>42</td>
<td>90.31</td>
<td>2.150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Willingness to see counselor.

Ho8(d): Native American students' willingness to see a counselor will be independent of tribe of student and sex of counselor.

Hypothesis 8(d) was retained. A chi square test of independence did not find students' willingness to see the counselor to be dependent on either the tribe of the student or the sex of the counselor. All students, regardless of tribe, were equally willing to see either a male or female counselor. Results of this test appear in Table 42.
Table 42
Chi Square Test of Independence for Tribe, Sex of Counselor, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Sex</th>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Tribe</td>
</tr>
<tr>
<td>Crow</td>
<td>7</td>
<td>2</td>
<td>Crow</td>
</tr>
<tr>
<td>Chippewa-Cree</td>
<td>3</td>
<td>10</td>
<td>Chippewa-Cree</td>
</tr>
<tr>
<td>Blackfoot</td>
<td>2</td>
<td>7</td>
<td>Blackfoot</td>
</tr>
<tr>
<td>Assiniboia</td>
<td>1</td>
<td>3</td>
<td>Assiniboia</td>
</tr>
<tr>
<td>Northern</td>
<td>2</td>
<td>1</td>
<td>Northern</td>
</tr>
<tr>
<td>Cheyenne</td>
<td></td>
<td></td>
<td>Cheyenne</td>
</tr>
</tbody>
</table>

Chi square (1 df) = 9.390
P-value = .0519

In the preceding four tests of hypotheses, Ho8(a) to Ho8(d), no sub-hypotheses were rejected; therefore Ho8 was retained. No significant interaction effects were found for tribe of student and sex of counselor on any of the ratings scores for expertness, attractiveness, or trustworthiness. Main effects were not found in any of the analysis of variance tests. Students' willingness to see
the counselor they rated was not dependent on the tribe of
the student nor on the sex of the counselor.

**Tribe of Student and Counselor Place of Work**

**Hypothesis 9:** Native American students' perceptions of
counselor effectiveness will not be affected by the tribe
of the student or the counselor's place of work.

The tests that follow examined the effects of the
variables tribe of student and counselor place of work on
the expertness, attractiveness, trustworthiness, and
willingness to see the counselor variables. The first
three sub-hypotheses were tested with analysis of variance
and the fourth with a chi square test for independence.

Five tribes were considered: Crow, Chippewa-Cree,
Blackfoot, Assiniboin, and Northern Cheyenne.

**Expertness.**

**Ho9(a):** There will be no significant effects of
tribe of student or counselor place of work on and student
ratings of counselor expertness.

Since no significant interaction was found and no main
effects for tribe or counselor place of work were indicated
(Table 43), Ho9(a) was retained. Students' ratings of the
counselor's expertness were not influenced by the tribe to
which the student belonged nor were they influenced by the
counselor's association with either a Native American
center or a counseling center.
Table 43
Analysis of Variance for Tribe, Place of Work, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>3</td>
<td>6.453</td>
<td>2.151</td>
<td>1.146</td>
<td>.3423</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>4.358</td>
<td>4.358</td>
<td>2.323</td>
<td>.1354</td>
</tr>
<tr>
<td>Tribe x place of work</td>
<td>3</td>
<td>6.864</td>
<td>2.288</td>
<td>1.219</td>
<td>.3149</td>
</tr>
<tr>
<td>Residual</td>
<td>40</td>
<td>75.05</td>
<td>1.876</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attractiveness.

Ho9(b): There will be no significant effects of tribe of student or counselor place of work on student ratings of counselor attractiveness.

A 5 x 2 analysis of variance applied to rating scores of counselor attractiveness found no interaction effect of tribe or counselor place of work (Table 43). No main effects were found for tribe nor for counselor place of work; Ho9(b) was therefore retained. Student ratings were not affected by the tribe to which the student belonged and were also not affected by the counselor's association with either a counseling center or a Native American center.
Table 44
Analysis of Variance for Tribe,
Place of Work, and
Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>3</td>
<td>4.160</td>
<td>1.387</td>
<td>.5111</td>
<td>.6809</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>4.280</td>
<td>4.280</td>
<td>1.578</td>
<td>.2164</td>
</tr>
<tr>
<td>Tribe x place of work</td>
<td>3</td>
<td>1.968</td>
<td>.6559</td>
<td>.2418</td>
<td>.8673</td>
</tr>
<tr>
<td>Residual</td>
<td>40</td>
<td>108.5</td>
<td>2.713</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trustworthiness.

Ho9(c): There will be no significant effects of tribe of student or counselor place of work on student ratings of counselor trustworthiness.

No significant effect by interaction of tribe and place of work was found in a 5 x 2 analysis of variance of student scores of counselor trustworthiness. No main effects were caused by either tribe or place of work. Ho9(c) was therefore retained. All students, regardless of tribe, rated counselors working at a counseling center or a Native American center as equally attractive. Results of these tests are displayed in Table 45.
Table 45
Analysis of Variance for Tribe, Place of Work, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribe</td>
<td>3</td>
<td>8.917</td>
<td>2.972</td>
<td>1.428</td>
<td>.2478</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>4.349</td>
<td>4.349</td>
<td>2.090</td>
<td>.1560</td>
</tr>
<tr>
<td>Tribe x place of work</td>
<td>3</td>
<td>4.461</td>
<td>1.487</td>
<td>.7146</td>
<td>.5521</td>
</tr>
<tr>
<td>Residual</td>
<td>40</td>
<td>83.24</td>
<td>2.081</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Willingness to see counselor.

Ho9(d): Native American students' willingness to see a counselor will be independent of tribe of student and counselor place of work.

A chi square test of independence applied to students' willingness to see the counselor found that variable to be independent of the tribe of student and the counselor place of work, so Ho9(d) was retained. Results of this analysis are displayed in Table 46.

Tests for interaction of tribe of student and counselor place of work found no interaction effect for these two variables. Tests for main effects found no significant effect by either variable. Students' willingness to see the counselor was independent
Table 46
Chi Square Test of Independence for Tribe, Place of Work, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Place of Work</th>
<th>Tribe</th>
<th>Place of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAC</td>
<td>CC</td>
<td></td>
</tr>
<tr>
<td>Crow</td>
<td>7</td>
<td>2</td>
<td>Crow</td>
</tr>
<tr>
<td>Chippewa-Cree</td>
<td>7</td>
<td>6</td>
<td>Chippewa-Cree</td>
</tr>
<tr>
<td>Blackfoot</td>
<td>3</td>
<td>6</td>
<td>Blackfoot</td>
</tr>
<tr>
<td>Assiniboin</td>
<td>4</td>
<td>0</td>
<td>Assiniboin</td>
</tr>
<tr>
<td>Northern Cheyenne</td>
<td>2</td>
<td>1</td>
<td>Northern Cheyenne</td>
</tr>
</tbody>
</table>

Chi square (4 df) = 6.805
P-value = .1462

of tribe of student and counselor place of work as well.
Ho9 was thus retained.

Reservation Background and Counselor Ethnicity

Hypothesis 10: Native American students' perceptions of counselor effectiveness will not be affected by the tribe of the student or the counselor's place of work.

Reservation background, whether the student had grown up on a reservation or off a reservation, and counselor ethnicity were the variables focused on by Hypothesis 10.
Interaction effect for those two variables and main effects on ratings of expertness, attractiveness, and trustworthiness were determined by three separate analysis of variance tests. Effects of those variables on student willingness to see the counselor were determined by a chi square test of independence.

**Expertness.**

Ho10(a): There will be no significant effects of reservation background of student or counselor ethnicity on student ratings of counselor expertness.

An interaction effect of reservation background and counselor ethnicity was found on ratings of expertness. An F-value \((1,60) = 4.070, p = .0487\) determined that Ho10(a) would be rejected. Inspection of combination means for treatments indicated that on-reservation background students rated Native American counselors lower than off-reservation background students did. A significant main effect was also demonstrated for the ethnicity factor; students' ratings of Native American counselors' expertness was higher than ratings of non-Native American counselors. Ho10(b) was rejected; results of the 2 \(\times\) 2 analysis of variance, treatment means, and treatment combination means are illustrated in Table 47.
Analysis of Variance for Reservation Background, Ethnicity, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.2934</td>
<td>.2934</td>
<td>.5024</td>
<td>.4816</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>17.71</td>
<td>17.71</td>
<td>30.33</td>
<td>0.000*</td>
</tr>
<tr>
<td>Reservation background x ethnicity</td>
<td>1</td>
<td>2.377</td>
<td>2.377</td>
<td>4.070</td>
<td>.0487*</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>30.95</td>
<td>.5840</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05

Treatment Means

<table>
<thead>
<tr>
<th>Reservation background</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>2</td>
<td>16.67</td>
</tr>
<tr>
<td>Off</td>
<td>2</td>
<td>16.13</td>
</tr>
</tbody>
</table>

Ethnicity

| Native American      | 2 | 18.50 |
| Non-Native American  | 2 | 14.29 |

Treatment Combination Means

<table>
<thead>
<tr>
<th>Combination</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>On/Native American</td>
<td>24</td>
<td>18.00</td>
</tr>
<tr>
<td>On/non-Native American</td>
<td>15</td>
<td>15.33</td>
</tr>
<tr>
<td>Off/Native American</td>
<td>14</td>
<td>19.00</td>
</tr>
<tr>
<td>Off/ non-Native American</td>
<td>4</td>
<td>13.25</td>
</tr>
</tbody>
</table>
Attractiveness.

Ho10(b): There will be no significant effects of reservation background of student or counselor ethnicity on student ratings of counselor attractiveness.

A 2 x 2 analysis of variance for interaction of reservation background and counselor ethnicity on student ratings of attractiveness found no significant effect (Table 48). No main effect was produced by reservation background, but a main effect was produced by ethnicity, so Ho10(b) was rejected. Reservation background did not influence students' ratings of counselor attractiveness, but ratings were influenced by counselor ethnicity, F(1,60) = 20.62, p < 0.000. Examination of treatment means established that students rated Native American counselors as more attractive than non-Native American counselors.

Trustworthiness.

Ho10(c): There will be no significant interaction among reservation background of student, counselor ethnicity, and student ratings of counselor trustworthiness.

Analysis of variance (2 x 2) found no significant interaction effect for reservation background and counselor ethnicity on student ratings of trustworthiness. Tests for main effects found no effect for reservation background, but did find a significant effect for ethnicity, F(1,60) = 3.168, p < 0.000; Ho10(c) was therefore rejected.
Table 48
Analysis of Variance for Reservation Background, Ethnicity, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.2806</td>
<td>.2806</td>
<td>.3522</td>
<td>.5554</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>16.43</td>
<td>16.43</td>
<td>20.62</td>
<td>0.000*</td>
</tr>
<tr>
<td>Reservation background x ethnicity</td>
<td>1</td>
<td>2.414</td>
<td>2.414</td>
<td>3.029</td>
<td>.0876</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>42.24</td>
<td>.7968</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>2</td>
<td>18.35</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>2</td>
<td>14.29</td>
</tr>
</tbody>
</table>

Examination of treatment means indicated that Native American counselors were rated more trustworthy than non-Native Americans. Students' ratings were not influenced by their reservation background, but they were affected by whether the counselor was Native American or non-Native American. Results of this analysis can be seen in Table 49.
Table 49
Analysis of Variance for Reservation Background, Ethnicity, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>1.794</td>
<td>1.794</td>
<td>2.546</td>
<td>.1166</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>20.95</td>
<td>20.95</td>
<td>29.74</td>
<td>0.000*</td>
</tr>
<tr>
<td>Reservation background x</td>
<td>1</td>
<td>2.232</td>
<td>2.232</td>
<td>3.168</td>
<td>.0808</td>
</tr>
<tr>
<td>ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>37.35</td>
<td>.7046</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*Significant at alpha = .05.

Treatment Means

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>2</td>
<td>18.49</td>
</tr>
<tr>
<td>Non-Native American</td>
<td>2</td>
<td>13.92</td>
</tr>
</tbody>
</table>

Willingness to see counselor.

Ho10(d): Native American students' willingness to see a counselor will be independent of reservation background of student and counselor ethnicity.

The effects of reservation background and counselor ethnicity on students' indication of willingness to see the
counselor they rated was determined by a chi square analysis of independence. No significant effect was found, so Ho040 was retained. Students were not influenced by their background on or off a reservation or by whether the counselor was Native American or non-Native American. Ho10(d) was retained.

Table 50
Chi Square Test of Independence for Reservation Background, Ethnicity, and Student Willingness to See Counselor.

<table>
<thead>
<tr>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reservation Background</td>
</tr>
<tr>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>On</td>
<td>19</td>
</tr>
<tr>
<td>Off</td>
<td>13</td>
</tr>
</tbody>
</table>

Chi square (1 df) = 1.567

P-value = .2107
Tests of the preceding four sub-hypotheses, considering the independent variables of reservation background and counselor ethnicity, utilized analysis of variance and chi square independence measures. Interaction of reservation background and counselor ethnicity on ratings of expertness was found, and significant main effects were found to be produced by the ethnicity variable on both the attractiveness and trustworthiness ratings; Ho10 was rejected. Willingness to see the counselor, however, was independent of reservation background and counselor ethnicity.

**Reservation Background and Sex of Counselor**

Hypothesis 11: Native American students' perceptions of counselors will not be affected by the reservation background of the student or the counselor's ethnicity.

The next hypothesis, H011, determined the effects of the reservation background, on or off a reservation, and sex of counselor on ratings of expertness, attractiveness, and trustworthiness and effects on willingness to see the counselor. Three analyses of variance and a chi square test of independence were used.

**Expertness.**

H011(a): There will be no significant effects of reservation background of student or sex of counselor on student ratings of counselor expertness.

A 2 x 2 analysis of variance established no significant interaction of reservation background and sex of counselor on student ratings of counselor.
attractiveness. No main effects were found for either variable. Students of different backgrounds did not rate male and female counselors' expertness differently. Holl(a) was retained, as Table 51 illustrates.

Table 51
Analysis of Variance for Reservation Background, Sex of Counselor, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.3472</td>
<td>.3472</td>
<td>.4877</td>
<td>.4880</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>.4726</td>
<td>.4726</td>
<td>.6638</td>
<td>.4189</td>
</tr>
<tr>
<td>Reservation background x sex</td>
<td>1</td>
<td>.9253</td>
<td>.9253</td>
<td>1.300</td>
<td>.2594</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>37.73</td>
<td>.7119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attractiveness.

Holl(b): There will be no significant effect of reservation background of student or sex of counselor on student ratings of counselor attractiveness.

No significant interaction of reservation background, sex of counselor, and student ratings of counselor attractiveness was found; neither variable produced any significant effect in tests for main effects. Holl(b) was
therefore retained. Students' ratings of the counselor's attractiveness were not influenced by their reservation background or the sex of the student. Results of this 2 x 2 analysis of variance are shown in Table 52.

Table 52

**Analysis of Variance for Reservation Background, Sex of Counselor, and Attractiveness**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.2155</td>
<td>.2155</td>
<td>.2549</td>
<td>.6158</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>1.770</td>
<td>1.770</td>
<td>2.093</td>
<td>.1539</td>
</tr>
<tr>
<td>Reservation background x sex</td>
<td>1</td>
<td>.1377</td>
<td>.1377</td>
<td>.1628</td>
<td>.6882</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>44.81</td>
<td>.8455</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Trustworthiness.**

Hol1(c): There will be no significant effects of reservation background of student or sex of counselor on student ratings of counselor trustworthiness.

Hol1(c) was retained; no significant interaction of reservation background and sex of counselor was found in a 2 x 2 analysis of variance (Table 53). Main effects tests showed no significant effect for either the reservation
background or sex of counselor variables on student ratings of counselor trustworthiness. Students, regardless of background, rated male and female counselors as equally trustworthy.

### Table 53

Analysis of Variance for Reservation Background, Sex of Counselor, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation Background</td>
<td>1</td>
<td>.0933</td>
<td>.0933</td>
<td>.1117</td>
<td>.7396</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>2.165</td>
<td>2.165</td>
<td>2.592</td>
<td>.1134</td>
</tr>
<tr>
<td>Reservation Background</td>
<td>1</td>
<td>.0037</td>
<td>.0037</td>
<td>.0045</td>
<td>.9470</td>
</tr>
<tr>
<td>x Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>44.27</td>
<td>.8353</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Willingness to see counselor.**

H01(d): Native American students' willingness to see a counselor will be independent of reservation background and sex of counselor.

Reservation background and sex of counselor were found to be independent of willingness to see the counselor in a
chi square test of independence for Hypothesis 11(d). The hypothesis was therefore retained. Students' willingness was not affected by their reservation background or the sex of the counselor. Results of the test are shown in Table 54.

Table 54

Chi Square Test of Independence for Reservation Background, Sex of Counselor, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Observed Frequencies</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation Background</td>
<td>Sex of Counselor</td>
</tr>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>On</td>
<td>15</td>
</tr>
<tr>
<td>Off</td>
<td>4</td>
</tr>
</tbody>
</table>

Chi square (1 df) = 1.724
P-value = .1892

Tests of hypotheses for the reservation background and sex of counselor variable effects on ratings of expertness, attractiveness, and trustworthiness found no interaction effects. No main effects were produced by reservation
background or sex of counselor on any of the ratings, as
tested by three separate analyses of variance, and these
variables were also found to be independent of
students' willingness to see a counselor by application of a
chi square test of independence. Hypothesis 10 was
retained.

Reservation Background and Counselor Place of Work

Hypothesis 12: Native American students' perceptions
of counselors will not be affected by the reservation
background of the student or by the counselor's place of
work.

The four tests which follow examined the effects of
independent variables reservation background and place of
work on ratings of expertness, attractiveness,
trustworthiness, and willingness to see the counselor.
Sub-hypotheses were tested by three analyses of variance
and a chi square test of independence applied to rating
scores and indication of willingness to see the counselor
derived from the questionnaire.

Expertness.

H012(a): There will be no significant effects of
reservation background or place of work on student ratings
of counselor expertness.

A 2 x 2 analysis of variance found no interaction
effect of reservation background and place of work on
ratings of expertness. Tests for main effects found no
effect for reservation background; a significant effect was
produced, however, by place of work, F(1,60) = 4.654, p =
.0356. H012(a) was rejected. Students' reservation background did not influence their ratings of the counselor's effectiveness, but the place of work of the counselor did. Inspection of treatment means established that counselors who worked at the Native American center were rated more highly than those who worked at the counseling center. Results of this analysis appear in Table 55.

Table 55
Analysis of Variance for Reservation Background, Place of Work, and Expertness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.1437</td>
<td>.1437</td>
<td>.2036</td>
<td>.6536</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>3.285</td>
<td>3.285</td>
<td>4.654</td>
<td>.0356*</td>
</tr>
<tr>
<td>Reservation background x place of work</td>
<td>1</td>
<td>.0892</td>
<td>.0892</td>
<td>.1264</td>
<td>.7236</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>37.41</td>
<td>.7058</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at alpha = .05

Treatment Means

<table>
<thead>
<tr>
<th>Place of Work</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling center</td>
<td>2</td>
<td>16.63</td>
</tr>
<tr>
<td>Native American center</td>
<td>2</td>
<td>18.44</td>
</tr>
</tbody>
</table>
Ho12(b): There will be no significant effects of reservation background of student or counselor place of work on student ratings of counselor attractiveness.

No findings of significant interaction or main effects of reservation background and counselor place of work on ratings of counselor attractiveness resulted in Ho12(b) being retained. Students' ratings of the counselor's attractiveness were not influenced by place of work or reservation background. Results of this analysis are shown in Table 56.

### Table 56

Analysis of Variance for Reservation Background, Place of Work, and Attractiveness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.3992</td>
<td>.3992</td>
<td>.4437</td>
<td>.5082</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>1.111</td>
<td>1.111</td>
<td>1.235</td>
<td>.2715</td>
</tr>
<tr>
<td>Reservation background x place of work</td>
<td>1</td>
<td>.3753</td>
<td>.3753</td>
<td>.4172</td>
<td>.5211</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>47.68</td>
<td>.8997</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Trustworthiness.

Ho12(c): There will be no significant effects of reservation background of student or counselor place of work on student ratings of counselor trustworthiness.

A 2 x 2 analysis of variance for interaction of reservation background and counselor place of work on student ratings of trustworthiness showed no significant effect (Table 57). Tests for main effects found neither variable produced a significant effect. Ho12(a) was retained. Students were not influenced by either their reservation background or the counselor's place of work in their ratings of the counselor's trustworthiness.

Table 57

Analysis of Variance for Reservation Background, Place of Work, and Trustworthiness

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation background</td>
<td>1</td>
<td>.1063</td>
<td>.1063</td>
<td>.1193</td>
<td>.7311</td>
</tr>
<tr>
<td>Place of work</td>
<td>1</td>
<td>1.738</td>
<td>1.738</td>
<td>1.951</td>
<td>.1683</td>
</tr>
<tr>
<td>Reservation background x place of work</td>
<td>1</td>
<td>.0002</td>
<td>.0002</td>
<td>.0002</td>
<td>.9874</td>
</tr>
<tr>
<td>Residual</td>
<td>53</td>
<td>47.21</td>
<td>.8908</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Willingness to see counselor.

H0: Native American students' willingness to see a counselor will be independent of reservation background and counselor place of work.

A chi square test of independence for variables of reservation background, counselor place of work, and students' willingness to see the counselor found no dependence among variables (Table 58). Hypotheses 12(d) was retained. Students' willingness to see the counselor was not influenced by their reservation background or the counselor's place of work.

Table 58
Chi Square Test of Independence for Reservation Background, Place of Work, and Willingness to See Counselor

<table>
<thead>
<tr>
<th>Reservation Background</th>
<th>Place of Work</th>
<th>Expected Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservation Background</td>
<td>Place of Work</td>
<td></td>
</tr>
<tr>
<td>NAC  CC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On 18 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off 6 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place of Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAC  CC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On 15.8 11.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off 8.2 5.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi square (1 df) = 1.284
P-value = .2571
Results of the analyses for this hypothesis determined no interaction effect by reservation background and counselor place of work on any of the three ratings scores, expertness, attractiveness, or trustworthiness. Tests for main effects found counselor place of work to have a significant effect on ratings of counselor effectiveness; further examination revealed counselors at a Native American center to be rated as more effective than counselors at a counseling center. No main effects were produced by the reservation background variable. Hypothesis 12 was rejected, although a chi square analysis found reservation background and counselor place of work to be independent of students' willingness to see the counselor.

SUMMARY

Sixty Native American students, selected by stratified random sample, rated the effectiveness of Native American and non-Native American counselors associated with a counseling center or a Native American center on the dimensions of expertness, attractiveness, and trustworthiness as defined by the Counselor Effectiveness Rating Scale and indicated whether the counselor they rated was someone they would be willing to see. Demographical data obtained by a student questionnaire and through Native
American Center records was used to determine if differences among students' ratings were influenced by sex, tribal affiliation, blood quantum, and reservation characteristics of the student.

Examination of the demographical data of the population and sample exposed certain unique characteristics of the Native American population and sample that distinguished them from the general undergraduate population at Montana State University:

1. Relatively more Native American students are freshmen and relatively fewer are seniors than the general undergraduate population.

2. The percentage of female students is greater among Native Americans than the general student body.

3. Relatively fewer Native Americans are enrolled in the College of Engineering and more are enrolled in the General Studies program than the general undergraduate population.

Other unique characteristics of the sample group were the home reservation of the student, blood quantum, tribal affiliation, kind of pre-college education, and on or off reservation life:

1. Reservations represented by the students in the sample were the Blackfoot, Crow, Cheyenne, Fort Belknap, Flathead, Fort Peck, and Rocky Boy reservations in Montana, Pine Ridge and White Earth in South Dakota, Turtle Mountain
and Chippewa in North Dakota, and Navajo in Arizona.

(2) With one exception, all students in the sample had at least 25% Indian blood; 27% had at least 76% Indian blood, 33% had 51 to 75% Indian blood, and 40% had 50% or less Indian blood.

(3) Native American tribes represented by the sample were the Crow, Chippewa-Cree, Blackfoot, Assiniboia, Northern Cheyenne, Salish-Kootenai, Sioux, and Navajo.

(4) Ninety-three percent of the students in the sample received their pre-college education in public schools: 3% in federal schools and 3% in church schools.

(5) Sixty-eight percent of the students in the sample were living on a reservation before attending college; thirty-two percent were not.

Of the sixty students who comprised the sample, 42 (70%) indicated that they would be willing to see the counselor that they rated. The largest percentage of students (90%) was willing to see the Native American counselor associated with a Native American center; the second largest percentage (75%) was willing to see the Native American counselor associated with a counseling center; the smallest percentage (40%) was willing to see a non-Indian counselor in a counseling center.

The statistical analyses consisted of three separate analysis of variance tests and a chi square test of independence for each pairing of two independent variables,
one independent variable related to the counselor and one independent variable related to the student (testing one hypothesis and its four sub-hypotheses). Dependent variables for the three analysis of variance tests were the three separately summed scores for the expertness, attractiveness, and trustworthiness dimensions of the Counselor Effectiveness Rating Scale. The dependent variable for the chi square test of independence in each set of four tests was the students' indication of willingness to see the counselor that they rated. Computer analyses using the MSUSTAT statistical programs AVMV and CSQ2 were applied to the data to determine interaction effects and main effects (AVMV) and independence (CSQ2). Results for each group of four hypotheses related to two independent and four dependent variables follow. (Three of the four sub-hypotheses are related to the summed scale scores and one is related to indication of willingness to see the counselor.)

For the first pairing of independent variables, no interaction of sex of student and ethnicity of counselor was found for any of the three student rating scores, expertness, attractiveness, and trustworthiness, nor were sex of student and ethnicity of counselor found to have an effect on the student's willingness to see the counselor. The ethnicity factor was found to be significant, however, for all three ratings scores. In all three cases, students
rated Native American counselors more highly than non-Native American counselors.

For the next four hypotheses, significant effects were not produced by the interaction of sex of student and sex of counselor on ratings of expertness, attractiveness, trustworthiness, and willingness to see the counselor. No significant main effects were produced by sex of student or sex of counselor. Students responded similarly to the counselor regardless of which sex student or which sex counselor was considered.

Focusing on effects of sex of student and counselor place of work on expertness, attractiveness, trustworthiness, and willingness to see the counselor, tests found no interaction effects. The first test, however, a 2 x 2 analysis of variance, showed a significant effect for place of work on student ratings of expertness. Counselors who worked at a Native American center were perceived as more expert (rated more highly) than counselors who worked at a counseling center.

Tests of hypotheses for the effects of blood quantum of student and counselor ethnicity independent variables on dependent variables expertness, attractiveness, trustworthiness, and willingness to see the counselor found no interaction of the independent variables on the dependent. Main effects were produced, however, for the ethnicity variable on expertness, attractiveness, and
trustworthiness and for the blood quantum variable on trustworthiness. Again, students rated Native American counselors as more expert, attractive, and trustworthy than non-Native American counselors, and students with high or low blood quantum rated Native American counselors as more trustworthy than students with medium blood quantum.

Considering the variables of blood quantum and sex of counselor, no significant interaction of either on ratings of expertness, attractiveness, and trustworthiness was found. Willingness to see the counselor was not dependent on those variables.

No interaction of blood quantum of the student and counselor place of work effects on students' perceptions was exhibited. Students of low, medium, and high blood quantum rated counselors equally in expertness, attractiveness, and trustworthiness; they were also equally willing to see the counselor they rated. Whether the counselor worked at a counseling center or a Native American center did not influence students' perceptions of the counselor in this pairing.

Tests for effects by the tribe of student and counselor ethnicity variable found no interaction of these on student ratings of counselor effectiveness. A significant effect was found, in each of the three analyses of variance, of counselor ethnicity on student ratings of expertness, attractiveness, and trustworthiness. In all
three instances, Native American counselors were rated more highly than non-Native American counselors. Willingness to see the counselor was not found to be related to the student's tribe or the counselor's ethnicity.

No significant interaction effects were found for tribe of student and sex of counselor on any of the rating scores for expertness, attractiveness, or trustworthiness. Students' willingness to see the counselor they rated was not dependent on the tribe of student nor on the sex of counselor. Main effects were not found in any of the analysis of variance tests.

The next four tests examined the effects of the variables tribe of student and counselor place of work on student ratings of counselor effectiveness. No significant interaction was found for either variable and no main effects were produced. Students' willingness to see the counselor they rated was not dependent on the tribe of the student nor on the counselor's place of work.

The next four tests, considering the independent variables of reservation background and counselor ethnicity, found an interaction effect for reservation background and counselor ethnicity on ratings of expertness. No significant interaction effects were found on the other two rating scores. Significant main effects were discovered, however, by the ethnicity variable on both the attractiveness and trustworthiness ratings.
Willingness to see the counselor was independent of reservation background and counselor ethnicity.

Tests for effects by the reservation background and sex of counselor variables on ratings of expertness, attractiveness, and trustworthiness found no interaction effects. No main effects were produced by reservation background or sex of counselor on any of the ratings. These variables were also found to be independent of students' willingness to see a counselor.

The final four tests, involving reservation background and counselor place of work variables, found no interaction effects for these two variables on ratings of counselor effectiveness, but tests for main effects showed a significant effect by place of work on ratings of counselor expertness. Willingness to see the counselor was independent of the reservation background and place of work variables.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

Previous research has determined that students' perceptions of counseling influence whether they are willing to see a counselor, and, if so, whether the counseling can be helpful to them. Considerations that affect the outcomes of counseling are a client's preference for a counselor who is of the same race or ethnicity and of the same sex as the client and whether the counselor is associated with a traditional institutional service, the counseling center, or, for Native American students, with some other less alien service such as a Native American center. Students may be more likely to see a counselor if sex, ethnicity, and location of the counseling service are in alignment with the student's preferences and expectations.

The perception a client has of the counselor as someone who can be of help to the client, whether the client sees the counselor as an attractive (likable, friendly, and approachable) individual, and the perception that the counselor is someone the client can trust all
influence the outcome of counseling as well and both have
been found to be particularly important considerations in
counseling Native Americans.

An important corollary issue to the perceptions Native
American students have of counselors is determining
similarities and differences in these students based on
demographical characteristics of the students. Indian
writers have suggested that it is meaningless to group
together "Indians" and assume that different backgrounds,
tribe, reservation, and blood quantum, for example, do not
cause different perceptions and different needs among
Native Americans.

This study examined two related areas: (1) the
effects of certain characteristics of the counselors on
Native American students' perception of the counselor and
willingness to see the counselor, and (2) the effects of
demographic characteristics of Native American students on
their perception of counselors and their willingness to see
counselors.

Given these considerations, this research proposed to
answer these general questions:

(1) Are students' perceptions of a counselor's
effectiveness affected by a counselor's ethnicity?

(2) Are students' perceptions of a counselor's
effectiveness affected by the sex of a counselor?

(3) Are students' perceptions of a counselor's
effectiveness affected by the counselor's place of work?

(4) Do male and female students perceive counselors differently?

(5) Do students' perceptions of counselors depend on the percentage of Native American blood the student has?

(6) Do students' perceptions of counselors depend on the tribe to which the student belongs?

(7) Are students' perceptions of counselors influenced by whether the student has been living on or off a reservation?

To answer the questions of the research, a stratified random sample of 60 Native American students was selected to rate the effectiveness of counselors and to indicate willingness to see the counselors. By random groups, the students rated slide/audiotape counseling sessions of a counselor and a student who was expressing concern about his/her academic and personal goals and achievement. Each group rated a counselor in one of six different counselor conditions varying counselor sex, ethnicity, and place of work.

Students rated the counselors according to Atkinson's Counselor Effectiveness Rating Scale, a scale which measures three dimensions of counselor effectiveness, expertness, attractiveness, and trustworthiness. These students also answered a brief questionnaire which indicated whether they would be willing to see the
counselor they had rated and which identified biographical data pertaining to their background as an Indian.

The general questions were developed into twelve null hypotheses; each with four sub-hypotheses. Dependent variables for the study were the summed scores representing each of the three dimensions on the CERS, expertness, attractiveness, and trustworthiness, and the student's indication of whether he or she was willing to see the counselor he or she had rated. Independent variables were counselor characteristics; ethnicity, sex, and place of work; and student characteristics; sex, blood quantum, tribe, and reservation background.

Descriptive statistics deemed to be useful in extending the generalizability of the study, characteristics of the university undergraduate students, of the Native American population, and of the Native American sample, indicated that these students were more likely to be freshmen and less likely to be seniors than the students as a whole, had a greater percentage of female students than the general undergraduate population, and were less likely to be enrolled in the College of Engineering and more likely to be enrolled in the General Studies program than the general population. Unique characteristics of the sample were the reservations they represented (Blackfoot, Crow, Cheyenne, Turtle Mountain, Fort Belknap, Flathead, Fort Peck, Rocky Boy, Pine Ridge,
Chippewa, Navajo, and White Earth), the percentage of Indian blood they had (all had at least 25%, 39% had 25-50%, 33% had 51-75%, and 27% had more than 75% Indian blood), the tribes they represented (Crow, Chippewa-Cree, Blackfoot, Assiniboine, Northern Cheyenne, Salish-Kootenai, Sioux, and Navajo), and their reservation background (68% had been living on a reservation before attending college, 32% had not).

Some general attitudes toward counselors were revealed. Seventy percent of all subjects (42 students) were willing to see the counselor they rated on the tape; the largest percentage (90%) was willing to see the Native American counselor associated with a Native American center, the second largest percentage (75%) was willing to see the Native American counselor associated with a counseling center, and the smallest percentage (40%) was willing to see a non-Native American counselor in a counseling center.

The statistical analyses consisted of three separate analysis of variance tests and a chi square test of independence for each pairing of two independent variables, one independent variable related to the counselor and one independent variable related to the student. Each pair of independent variables was tested with each of the three rating scores (analyses of variance) and with indication of willingness to see the counselor (chi square test of
Analyses were performed with the AVMV and CSQ2 programs of MSUSTAT, a statistical analysis program developed by Dr. Richard Lund of Montana State University. Interaction effects, main effects, and independence were tested at the .05 level of confidence.

The analysis of variance and chi square independence tests yielded significant results when certain variables were paired:

1. Pairing reservation background and counselor ethnicity caused an interaction effect on ratings of the counselor's expertness.

2. Pairing sex of student and ethnicity of counselor produced a main effect by the ethnicity factor on all three rating scores, expertness, attractiveness, and trustworthiness.

3. Pairing blood quantum of student and ethnicity of counselor produced a main effect by the ethnicity factor on all three ratings scores.

4. Pairing blood quantum of student and ethnicity of counselor also produced a main effect by the blood quantum factor on ratings of trustworthiness.

5. Pairing tribe of student with counselor ethnicity produced a main effect by counselor ethnicity on all three effectiveness ratings.

6. Pairing of reservation background and counselor ethnicity produced a main effect for counselor ethnicity on
the two rating scales which did not show an interaction effect; attractiveness and trustworthiness.

(7) Pairing the place of work variable with sex of student produced a main effect on student ratings of expertness by the place of work variable.

(8) Pairing reservation background and counselor place of work produced a main effect by counselor place of work on ratings of counselor expertness.

(9) Pairing blood quantum and counselor ethnicity produced a main effect by the blood quantum variable on ratings of trustworthiness.

CONCLUSIONS AND DISCUSSION

Ethnicity

The variable exerting the most influence throughout all tests was ethnicity. Ethnicity produced a significant main effect on all three ratings scores, expertness, attractiveness, and trustworthiness, when paired with all four student variables, sex, blood quantum, tribe, and reservation background. All effects were significant at the .05 level; all but one was significant at alpha < 0.001. In every case, Native American students clearly expressed a preference for a Native American counselor over a non-Native American. This conclusion supports Dauphinais, Dauphinais, and Rowe's reporting that Indian high school students rated a counseling interview higher
when they believed it to be conducted by an Indian counselor (1981). In a survey reported a year earlier, however, LaFromboise, Dauphinais, and Rowe's (1980) high school students indicated that it was not important that the counselor be an Indian. In another study which followed, conducted by the same authors (1980), high school Indian students were more likely to choose a non-Indian than an Indian as "someone I would see if I had a problem." Overall, these studies with high school students seem to indicate no clear preference for a Native American counselor. Two of these studies which found students did not prefer a Native American counselor gathered data with a response to a direct question asking specifically if a Native American counselor was preferred. The third study does not make clear whether students knew they were comparing Native American and white counselors. The students, high school students still presumably seeking a clear sense of their own values and beliefs, may have answered in a way they considered to be socially acceptable. Support for this assumption can be drawn by noting that the fourth study, one in which high school students were not aware that they were expressing a preference, did find a preference for Native American counselors.

Recent research with Native American college students, conducted at Montana State University by Haviland et al.
reported that Native Americans expressed a strong preference for a Native American counselor when asked to identify the counselor they would prefer. A limitation of that research, however, was that these students were clearly aware that they were being asked to choose between a Native American and a white counselor. Sattler (1970) emphasizes the need for minority subjects to be unaware that a race variable is under investigation and the difficulty of keeping subjects unaware. The present research attempted to discover if Native American students would be as favorably inclined toward a white as a Native American counselor by obtaining data from randomly assigned group ratings of the counselor in a situation in which students did not know that Native American or non-Native American counselors were being compared; consequently, Native American preference for Native American counselors was not a consciously expressed preference in this research and therefore not a response influenced by expectations. Native American ethnicity strongly influenced students' preferences even when cultural variations of tribe, reservation background, and blood quantum were taken into account.

In the reservation/ethnicity interaction effect found on perception of counselor expertness, the on reservation group unexpectedly did not rate Native Americans as highly as the off reservation group did; however, both groups
preferred Native American counselors over non-Native American counselors.

**Place of Work**

The place of work factor produced an effect in two instances; the pairing of place of work and sex of student and the reservation background/place of work pairing, both relative to expertness ratings. In both cases, Native American students considered the counselor associated with the Native American center to be more expert than the one with the counseling center. The finding that this variable did not produce a stronger influence is neither supported nor contradicted in the literature, since little research has considered the location of counseling service as an important variable; the notable exception was Smith (1974) who found students about equally receptive to centralized and de-centralized counseling services. The writings of several respected authorities in minority counseling strongly suggest Native American students would be more amenable to counseling services associated with Native American centers. The present research provides some support, but not strong support, for those ideas.

**Blood Quantum**

Blood quantum influenced students' perceptions in two instances: the pairing of blood quantum with counselor ethnicity and with place of work. Students of high or low blood quantum were found to consider Native American
counselors more trustworthy than students of medium blood quantum; however, all students' ratings of counselor trustworthiness were affected by the ethnicity of the counselor, high and low blood quantum students moreso. Failure of the medium blood quantum group to perceive counselors differently may have been the result of the arbitrary division of this group of students into three categories, low, medium, and high, rather than into two, low and high. Since trust has been clearly established as a crucial counseling variable, this finding must be given importance even though it occurred in only one pairing. The Native American ethnicity of the counselor may be more important to some groups of Native Americans than to others.

The blood quantum variable also produced a significant effect on trustworthiness when paired with place of work. Students with high and low blood quantum rated Native American students as more trustworthy than Native American students with medium blood quantum, but all three groups rated Native American counselors as more trustworthy than non-Native American.

The effects noted by blood quantum in these two instances contradict the research by Haviland et al. (1983), which found blood quantum to have no effect on the expressed preferences of Native American students for counselors, although it should be noted that the present
research was determining perceptions of students rather than overtly expressed preferences.

Reservation Background

One could expect the reservation background factor to be the most likely to distinguish among groups of Native American students. Living on a reservation would seem likely to imbue the student with values different from those encouraged in a non-Indian environment. Reservation background contributed to the interaction effect of reservation background and counselor ethnicity on ratings of the counselor's expertness. On reservation background students rated Native American counselors lower in expertness than off reservation background students, and on reservation background students rated non-Native American counselors higher in trustworthiness than off reservation students did. These rather unexpected results could be explained by concluding that on reservation students coming to college are subjected to discrimination that leads them to devalue the Indian counselor's expertness, as McDonald (1978) suggests, but it is perhaps just as reasonable to presume that having come from a strong Indian support society, the on reservation student would have a stronger self-concept as an Indian and be less likely to devalue the Indian counselor. Other research has not considered the effects of reservation background on student perceptions.
Non-significant Variables

Of perhaps as much interest and importance were the variables in this study, sex and tribe, which were found to exert no influence on students' preferences and attitudes toward counselors.

Sex. Clearly, neither sex of student differed in its perceptions of counselors. Equally obviously, neither sex of counselor was preferred under any conditions. These students were equally willing to see male and female counselors and their ratings of male and female counselors were the same. These findings contradict the Littrell and Littrell research (1982) which found a preference among females for a female counselor and among males for male counselors when expressing academic, vocational, or personal concerns, the Haviland et al. (1983) research which found both males and females to prefer the same sex counselor in personal situations and males to prefer the same sex counselor in academic-vocational situations as well, and research results reported by other minority and non-minority researchers. In this study, in all possible variable pairings, sex made no difference.

Tribe. No effects whatsoever were produced by the tribe of the student. These Native Americans did not perceive counselors differently regardless to which tribe they belonged. This conclusion is particularly interesting since tribal differences are often cited by Indian
educators as a factor distinguishing some Native American students from others. Tribe did not account for any differences in the counselor ratings or in willingness to see the counselor.

Overall, very little difference among these Native American students was found when demographic differences were considered, despite the fact that Indian spokespersons have emphasized that cultural differences among tribes and reservation backgrounds need to be considered. Perhaps the differences to be detected were too subtle for the instrument of this study; nevertheless, the only conclusion that can be drawn from the data is that these students do not differ because of their somewhat different backgrounds. Sex, tribe, blood quantum, and reservation influences are apparently small.

Generalizability

Considering the sampling technique employed, the results of this study can be inferred without reservation to the Native American population at Montana State University. It seems reasonable to generalize also to Native American student populations of colleges and universities in the Northwest, and, if comparability of the population characteristics of blood quantum, tribe, and reservation background exists, to many of the 172 colleges and universities with significant Native American enrollments as well. Considering the failure of this
research to find distinctly different preferences among Native Americans of different backgrounds, the results of this study, and other Native American research as well, can be generalized with some likelihood that they are in fact applicable to other Native American students.

RECOMMENDATIONS

Applicability

The results of this study are noteworthy to both college counseling centers and college Native American centers and are applicable in several respects.

Within the limitations of finances and personnel, college counseling centers should recognize that a Native American counselor of either sex will be responded to much more favorably by Native American students. A strong recommendation can be made that counseling centers of colleges and universities with appreciable Native American populations employ a Native American counselor.

Noting the finding that Native American students are perhaps more receptive to a counselor associated with a Native American center, a more plausible alternative might be to establish or to expand Native American centers to employ trained professional Native American counselors, perhaps working in conjunction with college counseling centers.

Sex of the counselor is apparently not an important
consideration in making a counselor available to Native American students, since both sexes are responded to similarly by Native American students; therefore, no recommendation regarding sex of the counselor can be made.

Finally, considering the favorable response of these students to both Native American and non-Native American counselors using a client-centered counseling approach, counseling center and Native American center administrators might note that this philosophical approach will not likely be a deterrent to counseling.

Further Research

This research suggests areas appropriate for further research:

(1) If differences in preference or perception among Native American students exist that are not influenced by sex, blood quantum, tribe, or reservation background as measured in this study, there is a need to determine what other differences might exist or what kind of instrument could be designed to identify these characteristics or others that would distinguish among Indian cultural groups.

(2) Research among Indian cultural groups conducted by some other methodology, as perhaps an anthropological approach, needs to be considered to establish what differences among groups might exist.

(3) Given that it would be reasonable to employ a
Native American counselor in a counseling center and also given that this counselor would be employed for an important but small Native American population, the perceptions and attitudes of white students toward a Native American counselor should be determined by further research.

(4) Further research to explain the unexpected and seemingly contradictory difference in the perceptions of counselors by high and low blood quantum students is needed.

(5) Further research to determine the factors influencing the difference between on reservation and off reservation students ratings of counselor expertness is needed.

(6) Further research to confirm the effects noted by the place of work variable in this research needs to be conducted.

(7) Research to determine to what extent Native American students are aware of the counseling resources available to them is needed. Similarly, research to determine what methods are most likely to be effective in informing Native American students of resources available to them is also needed.

(8) Determining to what extent Native American students now use counseling centers and to what extent they indicate satisfaction with them is also worthy of
research.

(9) A comparison of the effectiveness of counselors in Native American centers and in counseling centers as defined by the results of counseling is information that would be valuable to Native American centers and counseling centers alike.

(10) The results achieved by counseling in various Native American/non-Native American pairings of counselor and client using various counseling approaches is an area in which further research is needed.

(11) A comparison of the success of counseling for Native American students whose preference for ethnicity of the counselor is met and students whose preference is not met would be informative to both Native American and non-Native American counselors.

(12) Finally, it might be useful to compare these findings with those from various other institutions of higher education throughout the country.

Very little research exists relevant to counseling services for Native American college students. Questions that can provide data to assist Native American students in being successful in their college careers need to be asked and answered. Native American students have been considered to be too few and too insignificant for too long. Future research can provide ways and means for Native American students to achieve success in college.

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APPENDICES
RATING ACCORDING TO GAZDA'S GLOBAL SCALE

1.0 (Lowest score for a response)
A response in which the helper:
--attends to neither the content nor the surface feelings of the helpee;
--discredits, devalues, ridicules, or scolds the helpee;
--shows a lack of caring for, or belief in, the helpee;
--is vague or deals with the helpee in general terms;
--tries to hide his feelings or uses them to punish the helpee;
--reveals nothing about himself or discloses himself exclusively to meet his own needs;
--passively accepts or ignores discrepancies in the helpee's behavior that are self-defeating;
--ignores all cues from the helpee regarding their immediate relationship.

2.0
A response in which the helper:
--only partially attends to the surface feelings of the helpee or distorts what the helpee communicated;
--withholds himself from involvement with the helpee by declining to help, ignoring the helpee, or giving cheap advice before really understanding the situation;
--behaves in a manner congruent with some preconceived role he is taking, but is incongruent with his true feelings;
--is neutral in his nonverbal expressions and gestures;
--is specific in his verbal expression (e.g., gives advice or own opinion) or solicits specificity from the helpee (e.g., asks questions) but does so prematurely;
--does not voluntarily reveal, but may briefly answer questions regarding his own feelings, thoughts or experiences relevant to the helpee's concerns;
--does not accept discrepancies in the helpee's behavior but does not draw attention to them either;
--comments superficially on communications from the helpee regarding their relationship.
3.0 A response in which the helper:

- reflects the surface feelings of the helpee and does not distort the content;
- communicates his openness to entering a helping relationship;
- recognizes the helpee as a person of worth, capable of thinking and expressing himself and acting constructively;
- communicates his attention and interest through his nonverbal expressions or gestures;
- shows that he is open to caring for and believing in the helpee;
- is specific in communicating his understanding but does not point out the directionality emerging for helpee action;
- shows no signs of phoniness but controls his expression of feeling so as to facilitate the development of the relationship;
- in a general manner, reveals his own feelings, thoughts, or experiences relevant to the helpee's concerns;
- makes tentative expressions of discrepancies in the helpee's behavior but does not point out the directions in which these lead;
- discusses his relationship with the helpee but in a general rather than a personal way.

4.0 (Highest score for a response).
A response in which the helper:

- goes beyond reflection of the essence of the helpee's communication by identifying underlying feelings and meanings;
- is committed to the helpee's welfare;
- is intensely attentive;
- models and actively solicits specificity from the helpee;
- shows a genuine congruence between his feelings (whether they are positive or negative) and his overt behavior and communicates these feelings in a way that strengthens the relationship;
- freely volunteers specific feelings, thoughts, or experiences relevant to the helpee's concerns (these may involve a degree of risk taking for the helper);
- clearly points out discrepancies in the helper's behavior and the specific directions in which these discrepancies lead;
- explicitly discusses their relationship in the
immediate moment.

Responses may be rated 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, and 4.0.

Rate the following responses 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, or 4.0 according to the accompanying scale.

1. Teacher to teacher: "Our principal is really living in the dark ages. He won't let me follow through on any of the new teaching techniques I learned in college."

   1. "Why don't you solicit support for your ideas from other teachers? He'll have to go along with the majority."

2. Student to teacher: "I could get good grades, too, if I did what she does during the test."

   2. You get mad seeing someone do better than you by using those methods."

3. Teacher to teacher: "We'd be better off without those stupid psychologists! I sent one of my problem students up there for discipline last week, and he has been worse since he got back. Now I have reason to think the psychologist told him I'm just a poor teacher."

   3. "You think we should just get rid of the psychologists."

4. College student to college student: "I'm falling way behind in my course work this quarter and I just don't know how I'm going to catch up."

   4. "It's discouraging when you get in such a bind that you can't see your way out."

5. High school girl to teacher: "There are times when I feel like school is not important to me. Since I'm not going to college, there isn't much use for me to waste my time here."

   5. "It's frustrating to be caught in the middle of such a conflict."
6. Student to teacher: "I just hate to go home after school. If I'm not fighting with my parents, they're fighting with each other. It's always so uncomfortable at home."

Do you think it is something that will blow over?"

7. Student teacher to another student teacher: "If I had done what I thought was best instead of listening to my supervising teacher, the child's mother wouldn't be mad at me now."

That's hard to take. Want to talk about it?"

8. Boy to father: "Please let me go. EVERYBODY else is going."

I suppose it seems to you that I'm just being mean, that I don't care if you're embarrassed in front of your friends. I want us to understand each other; let's discuss it."

9. Student to teacher: "You're not fair with me. Why am I the only one who didn't get an 'A' on the project?"

Why wouldn't I be fair with you?"

10. Student to teacher: "You don't know what it's like to be laughed at behind your back."

It's not going to be an easy thing to talk about, but if you want to share some of this, I'll listen and do whatever I can."

11. One student to another: "I'm really in a bind for money. It looks like every time I get ahead, something happens and I have to spend all my savings. I need to stay out of school a while and work so I won't be broke all the time."

You would stay in school if you didn't have the financial problems. If it weren't for that, things
would be fine."

12. Student to counselor: "Things couldn't be better! You know that girl I was telling you about meeting last week? Well, we're going to be married. We decided that there is no way we can live apart much longer. Don't you think it's great?"

____ 12. "That's really great!"

13. Black to friend: "They may SAY they are an Equal Opportunity Employer, but believe me, they aren't. I could do a better job than half the people working there now, but there's no way I could get hired there! No use to try!"

____ 13. "That's a cop out. You're just afraid you might have to go to work."

14. Fifth grader, who has been absent frequently, to teacher: "I'm worried about my math grade. It seems that the harder I work, the lower my grade gets."


15. Girl to teacher: "I can understand how women were discriminated against when they had to do so much farm work, but I think women have it good now. I really get confused when my friends tell me I should work for women's liberation."

____ 15. "You don't feel discriminated against personally, so you're wondering whether you should work for women's liberation, and you're wondering how to relate to your friends who do."

16. Teacher to teacher: "I was hoping when I moved to this town I could make some new friends, but I've been home alone every night."

____ 16. "I understand just how you feel. The same thing happened to me when I first came, too."

17. Woman to friend: "Sometimes my job gets so frustrating I can hardly stand it. My supervisor just
isn't willing to give responsibility to a woman."

17. "Do you really think it is fair to blame all your problems on sex discrimination?"

18. Eighth-grade boy to student teacher: "I know someone who likes you and wants a date with you. Me!"

18. "It's flattering to know that I'm that important to you. I think I'd feel pretty uncomfortable about our age differences."

19. Student to counselor: "Here it is, almost time for graduation, and I have no idea what I want to do. I still haven't decided if I want to go to college or get a job with my dad, and everybody keeps telling me I have to make up my mind soon."

19. "You're feeling a lot of pressure about making this decision, and you're sort of afraid that the decision you make may not be the best for you."

20. Parents to teacher: "You told us at our last meeting that if we worked with Johnny at home his grades should improve. We have spent more than enough time with him, but his grades aren't any better."

20. "All the extra work doesn't seem to be paying off—you're discouraged."
First, thank you for your cooperation in agreeing to help in this research.

Let me tell you a little bit about what you will be doing. We are in the process of preparing tapes that will be used to train college counselors who will be employed specifically to counsel Native American college students. Your reaction to the counselor on this tape will help us evaluate what we are doing and make changes to provide better training.

The picture appearing on the screen is intended to make the counselor on the tape seem more real to you. This counselor, who has a Ph.D. in counseling psychology, is 34 years old and has been counseling in a (college counseling center) (Native American Center) for four years.

Just listen to the counselor and the student on the tape for the next few minutes. Then rate the counselor according to your own opinion of what you have just heard. A rating scale will be given to you after you have had a
few minutes to listen.

The student will be speaking first.

Thank you. This particular counseling session continued for a while beyond this point but we would like you to rate the counselor now on the basis of what you have heard. Please read the directions at the top of the scale carefully.
The STUDENT is serious, worried. At times he/she is feeling pretty sad. At times puzzled and confused. The STUDENT is thinking and searching a lot. Lots of pauses for reflection, slow speech.

The COUNSELOR is intensely attentive. He/She is slow, thoughtful, considering in his/her responses. The COUNSELOR is interested. The COUNSELOR's voice is pretty calm, even.

Student: Well, . . . . my advisor suggested it might be a good idea for me to come and talk to a counselor, . . . . so here I am.

Counselor: Fine, . . . . what would you like to talk about?

Student: The problem is that my grades aren't very good and unless I do something I won't be able to come back next quarter. . . . . I'm going to flunk out. . . . (pause, deep breath) . . I don't know. . . . I'm
working pretty hard at it, and I don't know what's wrong. I hope you can tell me what I should do in order to improve things.

Counselor: Okay, as I talk to students it seems that no matter how they see the problem to begin with, the first thing we need to do is spend some time talking about it. Often there's more to it than either the student or I realize in the beginning, or sometimes the problem actually turns out to be something different than we thought it was, so what we'll do at first is just talk about it and then what usually happens is that after people get a good understanding of what's going on, they are able to find ways of dealing with the situation. So that's basically the kind of help I see myself giving. . . . (Pause, waiting for STUDENT to respond, but no response comes) . . . . . . And I guess what I hear you saying at this point is that you are pretty worried about not doing well in school, in fact I guess it looks to you like you're probably going to flunk out and I hear too that you're (slowly and thoughtfully) not exactly sure how you got yourself to this point since you feel like you have been working pretty hard and maybe you're a little confused about what you could have done differently.

Student: Yeah, I guess I know what I want to do, I want
to get my grades up, but I don't know what I should do differently. (...) (puzzled) I don't know what I'm doing wrong.

Counselor: You're looking for a way to improve your grades but you're confused about what to do.

Student: Well it isn't like I'm not trying. I am. I put a whole lot of effort into my schoolwork.

Counselor: You're putting a lot into it but you aren't getting the kind of results you think you should be getting.

Student: Yeah, they're bad anyway. (Pauses, sighs heavily, realizing the weight of it. Speaks softly) ... . . . . . . . . . . They're real bad.

Counselor: I get a sense that you're feeling pretty hopeless, discouraged.

Student: It looks to me like I'm bound to flunk out, there's no way I can bring my grades up in the amount of time left this quarter.

Counselor: So even though you hate to admit you can't do
anything to save the situation, I guess you really don't want to give in to it either and accept it.

**Student:** (Discouraged) Maybe I should just quit and go home. . . . (Pause) Maybe there isn't even any point in finishing the quarter.

**Counselor:** You feel like just giving up and going home.

**Student:** (Quietly) . . . . . . Yeah I might do that.

**Counselor:** Just give in to it.

**Student:** (Still quietly) . . . . . . Just bag it all.

**Counselor:** I sense some real disappointment there.

**Student:** I, uh, . . . . I . . . just never thought of myself as a quitter.

**Counselor:** So you would be disappointed in yourself.

**Student:** It's that I really wanted, you know I really wanted to stay here, I really wanted to get a college degree. . . . . . . . . . . . . . . . I thought a college education was important and my family thought that it was
important too, and I really wanted to do it.

Counselor: So you'd not only be disappointing yourself if you didn't make it, but you'd be letting your parents down too.

Student: (Still discouraged, thinking of self being kicked out of school) I'm the only kid in my family who even thought about going to college. So it was kind of a big deal to my family.

Counselor: They're pretty proud of you just being here. Going to college made you special in your family I guess. It's kind of hard not to live up to that dream of theirs.

Student: Yeah, and my teachers in high school, too; they thought I should come to college, . . . . they thought I could do this.

Counselor: So you'd be letting a lot of people down who believed in you and I guess maybe you would also be telling them that you weren't capable of doing this, of getting this college education.

Student: Yeah. . . . Maybe they were wrong. . . . . Maybe they don't really know what I can do. . . . . Maybe
they were wrong.

Counselor: Maybe you're not as smart as they thought you were?

Student: Maybe they made a mistake about me, ... maybe I'm not what they thought I was.

Counselor: So you're doubting their idea of you and you're doubting yourself, too, your ability to handle college.

Student: Yeah, maybe I just WANTED them to be right. If they thought I could do it then I thought I could too, and so I wanted to.

Counselor: So they believed in you and thought you could do this, so I guess you went ahead on their belief in you, not really sure yourself that you would be able to do this.

Student: Maybe I'm just not smart enough to handle college. ... Maybe it's just that simple.

Counselor: So you just may not have what it takes to be a success here.

Student: (Really discouraged.) Well I sure am a failure
at it right now.

Counselor:  (Pauses before speaking.  Waiting.)  You've given it your best effort and you've failed.

Student:  Yeah, really.  .  .  .  .  .  .  .  .  .  .  .  (LONG pause, thinking about it)  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  .  Well, the failing part is right, but I don't know if I really have given it my best effort.

Counselor:  Okay, I guess at first I heard you saying you had given it your best effort but I guess now you aren't so sure?

Student:  Well .  .  .  yeah. I have worked hard at it, I don't want you to think I've just been goofing off or anything like that but I would have to say I could have worked harder at it too.  .  .  .  .  .  .  .  But it really doesn't seem fair that I put as much into it as I do and yet I don't get very much out of it.

Counselor:  Oh, so you're kind of spinning your wheels here with your effort. I guess I hear that as you look at it pretty honestly, it seems like you're not getting back what you put into it, in terms of grades at least.
Student: Yeah, (new idea) like the problem maybe isn't so much the time I put in but that I'm not doing the right things with my time, . . . I'm not studying in the right way or the right stuff or something like that, . . . but I'm not sure what.

Counselor: So I hear some confusion there, like you are lacking some information or some skill that maybe other students have that would make the time you put in produce better results, but you don't know what it is that you lack.

Student: (Pause, then speaks with some determination) . . . I know one thing I don't want to do when I think about it. I really don't want to quit before the quarter's over. I want to at least stick it out to see what happens.

Counselor: So what I hear now is that you're not willing to give up, that you're going to hang in there until the end at least, until the end of the quarter, and do what you can do. (Long pause, waits for response. Student sits quietly, thinking. No response comes.) And I also hear that you have a sense now of at least one thing that might be affecting your grades, this idea of not putting in the right kind of time, of not attacking the work in the right
way, and too of not being clear about what that right way or better way is.

_Student:_ Yeah, I think if I could get a better idea of how I should be studying that my grades would improve... Sometimes I get so discouraged after I've been working hard on something and I still get a bad grade on it.

_Counselor:_ So your discouragement at times really blocks you in getting what you want here.

_Student:_ When I get discouraged sometimes it's really hard for me to make myself go back to something.

_Counselor:_ The discouragement kind of kills your motivation, makes it look like there's no use.

_Student:_ I feel so dumb, ... I think I'm a real dummy and I just can't do it.

_Counselor:_ No faith in yourself at all.

_Student:_ (softly)... I really don't like feeling dumb.
Counselor: Just don't like what you see in yourself.

Student: I don't want to feel like a dummy, I want to feel like I'm just as smart as everybody else.
### Inter-Rater Reliability Scores

**Responses**

<table>
<thead>
<tr>
<th>Judges</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.0</td>
<td>2.0</td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>2.0</td>
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<td>2.0</td>
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</tr>
<tr>
<td></td>
<td>1.5</td>
<td>3.0</td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5.0</td>
<td>8.0</td>
<td>5.0</td>
<td>9.0</td>
</tr>
</tbody>
</table>

**Sums of Squared Scores and Totals**

- Response scores total squared = 385.00
- Response totals squared = 1138.00
- Judge totals squared = 6627.50

**Variances**

- Total scores: $\sigma_T^2 = 7.20$
- Sum of items: $\sum \sigma_i^2 = 2.68$

$R = .95$

APPENDIX E

COUNSELOR EFFECTIVENESS RATING SCALE

Instructions

The purpose of this inventory is to measure your perceptions of the counselor by having you react to a number of concepts related to counseling. In completing this inventory, please make your judgments on the basis of what the concepts mean to you. For example, THE COUNSELOR’S EXPERTNESS may mean different things to different people but we want you to rate the counselor based on what expertness in counseling means to you.

On the following page you will find 9 concepts and beneath each concept a scale on which to record your reaction. One of the concepts/scales is presented below with examples of how you might score it.

**THE COUNSELOR’S EXPERTNESS**

If you feel the counselor was very good, you might put an X in the far left space like this:

<table>
<thead>
<tr>
<th>good</th>
<th>X</th>
<th>bad</th>
</tr>
</thead>
</table>

If you feel the counselor is a good counselor but could be a little better, put an X in the second space like this:

<table>
<thead>
<tr>
<th>good</th>
<th></th>
<th>X</th>
<th>bad</th>
</tr>
</thead>
</table>

If you feel the counselor is a good counselor but could be a lot better, put an X in the third space like this:

<table>
<thead>
<tr>
<th>good</th>
<th></th>
<th></th>
<th>X</th>
<th>bad</th>
</tr>
</thead>
</table>

and so on.

Please remember these important points:

1. Place your X’s in the middle of the spaces, not on the boundaries.

<table>
<thead>
<tr>
<th>good</th>
<th></th>
<th>X</th>
<th>bad</th>
</tr>
</thead>
</table>

2. Be sure you check every scale even though you may feel that you have insufficient data on which to make a judgment. Please do not omit any.

3. Only put one check mark on each single scale.

4. Notice that the good and bad scales are reversed every other time, like this:

**THE COUNSELOR’S EXPERTNESS**

<table>
<thead>
<tr>
<th>good</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>bad</th>
</tr>
</thead>
</table>

**THE COUNSELOR’S FRIENDLINESS**

We want to know how you perceived the counselor. You can help us by not talking with anyone about your reactions until after the forms are collected.

<table>
<thead>
<tr>
<th>bad</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>good</th>
</tr>
</thead>
</table>
THE COUNSELOR'S EXPERTNESS
GOOD | | | | | | | | BAD

THE COUNSELOR'S FRIENDLINESS
BAD | | | | | | | | GOOD

THE COUNSELOR'S SINCERITY
GOOD | | | | | | | | BAD

THE COUNSELOR'S COMPETENCE
BAD | | | | | | | | GOOD

THE COUNSELOR'S SKILL
GOOD | | | | | | | | BAD

THE COUNSELOR'S RELIABILITY
BAD | | | | | | | | GOOD

THE COUNSELOR'S APPROACHABILITY
GOOD | | | | | | | | BAD

THE COUNSELOR'S LIKABILITY
BAD | | | | | | | | GOOD

THE COUNSELOR'S TRUSTWORTHINESS
GOOD | | | | | | | | BAD

Is this counselor someone you would go to if you had a problem you wanted to talk over?
YES _____ NO _____

Please give the following information about YOURSELF:

AGE_________ MALE_____ FEMALE_______
YEAR IN SCHOOL ______________________ MAJOR __________________
BLOOD QUANTUM ___________________
With this letter I would like to invite you to participate in some worthwhile research here at Montana State and to earn a little money at the same time.

As a doctoral student in the Department of Educational Services, I am conducting research that I hope will help to make the best possible counseling services available for all students at Montana State University. You have been selected to participate in this research. I would like to have you listen to and give an opinion of a counseling tape that will be used to train counselors. Listening to the tape and answering some questions will take you about twenty minutes, and in appreciation of your time I would like to pay you $5.00.

Please call me (994-4933, ask for Verla) or stop by Room 213, Reid Hall, within the next few days so that we can arrange a time that is convenient for you. Your participation will certainly be appreciated. I will be looking forward to hearing from you.

Sincerely,

Verla Dynneson
Doctoral Student
Dear

In case my letter last week did not reach you, or in case you were too busy last week to take part, I would like to invite you again to participate in the research of counseling services I am conducting through the Department of Educational Services here at MSU.

If you can spare about twenty minutes to listen to a tape of a counseling session, please call 994-4933 (ask for Verla) to make an appointment with me. In appreciation for your time and trouble, I’ll pay you $5.00. We can make the appointment for any afternoon or evening this week or next week or perhaps even for a morning hour if that is the only time you are free.

Since you are one of the people originally selected for this research, your participation is especially important to the project, and I hope you will be willing to assist. I will be looking forward to hearing from you soon.

Sincerely,

Verla Dynneson