Utah State University DigitalCommons@USU

All Graduate Theses and Dissertations

**Graduate Studies** 

5-1997

# An Investigation of Internalizing Social-Emotional Characteristics in a Sample of Lakota Sioux Children

Michael Shawn Williams Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/etd

Part of the Psychology Commons

#### **Recommended Citation**

Williams, Michael Shawn, "An Investigation of Internalizing Social-Emotional Characteristics in a Sample of Lakota Sioux Children" (1997). *All Graduate Theses and Dissertations*. 6306. https://digitalcommons.usu.edu/etd/6306

This Dissertation is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



# AN INVESTIGATION OF INTERNALIZING SOCIAL-EMOTIONAL

## CHARACTERISTICS IN A SAMPLE OF

## LAKOTA SIOUX CHILDREN

by

Michael Shawn Williams

## A dissertation submitted in partial fulfillment of the requirements for the degree

of

## DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

UTAH STATE UNIVERSITY Logan, Utah

## UMI Number: 9822042

UMI Microform 9822042 Copyright 1998, by UMI Company. All rights reserved.

This microform edition is protected against unauthorized copying under Title 17, United States Code.

UMI 300 North Zeeb Road Ann Arbor, MI 48103 Copyright © Michael Shawn Williams 1997

All Rights Reserved

### ABSTRACT

An Investigation of Internalizing Social-Emotional

Characteristics in a Sample of

Lakota Sioux Children

by

#### Michael Shawn Williams, Doctor of Philosophy

Utah State University, 1997

Major Professor: Dr. Kenneth W. Merrell Department: Psychology

It has only been recently that research in childhood psychopathology has focused on a group of disorders referred to as internalizing disorders. Internalizing disorders can include such problems as depression, anxiety, social withdrawal, and somatic complaints. Even though research has begun to focus on internalizing disorders with majority children, there has been very little research conducted on ethnic minority children, Native American children in particular.

The present study involved obtaining a Native American sample and determining their internalizing symptomology utilizing the Internalizing Symptom Scale for Children (ISSC), the Reynolds Child Depression Scale (RCDS), and the State Trait Anxiety Inventory for Children (STAIC). The study sample was compared to a matched normative sample from the ISSC database. Statistical procedures included bivariate correlations, analysis of variance (ANOVA), and discriminant function analysis. Correlations between the ISSC and the two comparison measures (RCDS and STAIC) were in the expected direction and of moderate to strong magnitude. The total internalizing symptoms scores of the Native American (Lakota Sioux) sample were similar to those of a matched comparison group from the ISSC national normative database. However, the study sample evidenced a unique pattern of responses on the ISSC subscales, reporting lower rates of both internalizing distress and positive affect. Teacher nominations of potential "internalizers" proved to be a poor predictor of their selfreported symptoms. Implications of this study for clinical practice and future research directions in this area are discussed.

(84 pages)

#### DEDICATION

I feel it is a great honor to be able to write a dedication for a dissertation. My formal educational process has been a long and arduous endeavor. I would like to dedicate this dissertation to Crazy Horse School and to my parents.

My formal education began in 1969 at Wanblee Day School. Some of the most important lessons I have learned in life took place in my K-12 years in Wanblee, South Dakota. I am most grateful for the students, staff, administration, and parents of Crazy Horse School. There are many individuals who have been very instrumental in getting this study off the ground and making it a success. Without the unending support of Crazy Horse School, this project would not have happened. As a result, I will always be grateful and honored to have been able to obtain an education in Wanblee.

This doctoral dissertation is also dedicated to my parents, Ward and Alice Williams, for their unconditional love and support. There were many times throughout the past years when I wanted to give up and quit. However, when I would call home I would be given the encouragement and strength to take the next step and "hang in there." I guess one of the most important things I learned from my parents was how to be stubborn and not quit. It's understandable; I have had such good role models.

v

### ACKNOWLEDGMENTS

There are many people whom I want to thank for making my education possible and a success. I would like to start with Dr. Carolyn Barcus for accepting me into the American Indian Support Project and always being there to help me along the way. I would also like to thank Drs. Ken Merrell, Sue Crowley, Margaret Lubke, and Dave Bush for being such good role models and mentors. From these people, a person can learn what it is to be a professional.

I also want to thank my classmates with whom I started this program: Benita, Tracy, Monique, Chris, Carol, and Trish. I thank you also, Norm. You are some of the best friends that I have ever had. I guess you might say that we have "been to hell and back," both academically and personally. I feel honored and richer for having you in my life.

Love, Kindness, Trust, Respect, Friendship, Companionship, Tolerance, Patience, Hope, Humor, Playfulness, Understanding. You have it all! Thank you.

Mitakuye Oyasin

# CONTENTS

V11

# Page

ABSTRACT	iii
DEDICATION	v
ACKNOWLEDGMENTS	vi
LIST OF TABLES	ix
CHAPTER	
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	5
The Nature of Internalizing Disorders	5
Risk Factors	6
Specific Forms of Internalizing Disorders	9
Internalizing Disorders and Native Americans	15
Problems in Assessing Internalizing Disorders with Children	17
Positive and Negative Affectivity	21
III. METHODS	22
Purpose and Objectives	22
Participants	22
Procedures	23
Instruments	25
IV. RESULTS	31
Correlations Among Self-Report Tests	31
Discriminant Analysis	35
V. DISCUSSION	39
Research Questions	39
Implications for Clinical/Educational Practice	42
Relationship to Previous Research	43

viii

# Page

Limitations of the Study Recommendations for Further Research	44 45
REFERENCES	47
APPENDICES	54
Appendix A:Consent FormAppendix B:Instruments Used in This StudyAppendix C:Source Tables for Analyses of Variances	55 58 69
VITA	72

# LIST OF TABLES

Table		Page
1	Sample Breakdown by Gender and Grade	24
2	Correlations Between ISSC Raw Scores and RCDS Raw Scores	32
3	Correlations Between ISSC Raw Scores and STAIC Raw Scores	34
4	ISSC Descriptive Statistics of Study Sample and Comparisons with a Matched Sample from the Normative Group Including	
	ANOVA Results and Effect Sizes	34
5	Classification Results for Discriminant Analysis	37
6	Structure Matrix	37
7	ISSC Scores of Teacher-Nominated "Internalizer" ( $\underline{n} = 14$ ) and Noninternalizing ( $\underline{n} = 46$ ) Students from the Study Sample, with	
	ANOVA Results and Effect Size Estimates	38
C-1	Study Sample Versus Matched Comprehensive Group	70
C-2	Teacher-Nominated Lakota Sioux Versus Noninternalizing Lakota Sioux Students	71

ix

## CHAPTER I

## INTRODUCTION

Children are an underutilized population in the area of mental health research. Generally, research on children lags 10 years behind that of adults (Reynolds, 1990). Consequently, it has only been in the last decade that there has begun to be a research focus on internalizing or inner-directed disorders of childhood (Reynolds, 1990). Disorders of this type are commonly viewed as "emotional" problems, rather than behavior problems (i.e., externalizing disorders) and may include depression, anxiety, somatic problems, and social withdrawal or incompetence (Walters, 1996). Internalizing disorders are considered to be an "overcontrolled" form of psychopathology (Achenbach, 1982).

Prevalence findings of internalizing disorders in children have varied depending on the particular disorder studied and the diagnostic criteria utilized. Prevalence estimates for the most common internalizing problems in childhood (i.e., depression and anxiety) have ranged from 2.0% to 7.3%, with a median prevalence estimate of about 4% (Merrell, 1994).

Internalizing disorders of childhood were initially not a focus of research attention because they were viewed as transient phases that children "pass through." However, there is mounting evidence that internalizing problems, such as depression, social withdrawal, and social incompetence, are likely to persist, even into adulthood (Walters, 1996). Additionally, internalizing disorders are associated with a variety of negative outcomes in childhood. The presence of internalizing problems is related to poor peer relationships and low self-esteem. Low self-esteem not only affects how children feel about themselves in general, but is strongly associated with academic achievement problems (Merrell, 1994). In addition, depression and depressive thinking are strong correlates of suicidal behavior (Beitchman, Inglis, & Schachter, 1992).

Despite the identified importance of internalizing disorders of childhood, intervention efforts have been thwarted by the difficulty in detection and problems in determining severity. The very nature of internalizing disorders, consisting of relatively covert, often unobservable symptoms, presents difficulty in diagnosis (Reynolds, 1990). This nature is in sharp contrast to externalizing disorders such as conduct disorder that are considered behavioral problems. Symptoms of externalizing disorders are more easily identifiable and observable to others in the child's environment.

The research on internalizing disorders to date has focused primarily on Caucasian or ethnic majority children. Compared to majority children, racial/ethnic minority children are even more underutilized in mental health research. Many economic and social challenges leave these children at an even greater risk for mental health problems including internalizing disorders. For instance, it is not uncommon for ethnic minority children to be raised in low socioeconomic status (SES) environments, suffer more mental and physical trauma, and have family and school environments that may be lacking in terms of available psychosocial support. These factors may put minority children at increased risk for internalizing disorders.

Included in the ethnic minorities at greater risk are Native American children. There are additional factors that may hinder Native American children in this area

specifically. In general, there may be cultural boundaries to seeking mental health services. The diversity of Native American cultures only compounds their difficulty. because there is no best treatment or assessment modality that works for all Native Americans (LaFromboise, 1989). In addition, health care services on American Indian reservations are grossly inadequate while problems with domestic violence, alcoholism, and trauma are high.

Given the seriousness of internalizing disorders of children, the fact that children are an underserved population in the area of mental health, and that ethnic minority children are even more underserved, more research addressing these issues is needed. This study addressed the research area of internalizing problems of ethnic minority children by obtaining comparative information on internalizing symptoms from a sample of Lakota Sioux children, and by studying relationships among various internalizing assessment instruments within this group.

Research questions for this investigation included:

1. What is the level of self-reported internalizing symptoms of the Lakota Sioux sample on the Internalizing Symptom Scale Checklist (ISSC) in relationship to that of a matched normative sample?

2. What evidence does the relationship among the various self-report measures of internalizing problems provide for the convergent validity of the ISSC?

3. How well do individual ISSC scores predict group membership, with regard to a Lakota Sioux sample versus national norm groups?

4. How well does the criterion of teacher-nomination of students according to perceived internalizing symptoms predict ISSC scores with the study sample?

#### CHAPTER II

## **REVIEW OF THE LITERATURE**

#### The Nature of Internalizing Disorders

The broad dimension of internalizing problems in childhood was articulated by Achenbach and Edelbrock (1978). They utilized mental health workers' reports, teachers' reports, and parents' reports of child behavioral and emotional problems. Statistical analysis revealed two main <u>broad band</u> syndromes that are comprised of specific <u>narrow band</u> behaviors. The broad band categories are externalizing or undercontrolled behaviors and internalizing or overcontrolled behaviors. Examples of specific narrow bands listed under externalizing behaviors include aggressiveness, acting out, and conduct disorder. Examples of specific narrow bands listed under internalizing behaviors include depression, anxiety, somatic complaints, and social withdrawal. Walters (1996) noted that a strong basis has been established for the existence of an externalizing domain in child psychopathology.

It has only been within the last few years that there has been a focus on research of internalizing disorders in children. Prior to this time, much of the research on children focused on externalizing disorders, which are overt in nature and thus readily identifiable. Examples of externalizing disorders include hyperactivity and aggressive behavior. Reynolds (1990) noted that we can trace, in part, some of the interest in these disorders to the publication in 1980 of the <u>Diagnostic and Statistical Manual of Mental Disorders</u>, (3rd ed.) by the American Psychiatric Association (1980). In addition, Reynolds (1990) further related how the widespread interest in formal diagnostic disorders of childhood and adolescence impacted school psychologists, many of whom were becoming aware of problems in children beyond those of an academic or behavioral nature.

It is also important to note that child and adolescent pathology does not always fit neatly in the dichotomous categorization of internalizing and externalizing disorders. As Reynolds (1990) wrote, a number of disorders may be expressed with distinctly mixed features, as well as the more recent findings of comorbidity of internalizing and externalizing disorders. There are even cases where symptoms that might be viewed as externalizing are included within diagnostic criteria for internalizing disorders. A good example of this is when the sad feeling of depression is being replaced by anger and hostility. In addition, comorbidity can exist among various internalizing disorders (Reynolds, 1990). The comorbidity of depression and anxiety has been well documented. Brady and Kendall (1992) have reported that overall, current estimates for the comorbidity of depression and anxiety in children ranges from 15.9% to 61.9%. According to Walters (1996), there is a consensus among researchers that the level of comorbidity for depression and anxiety in children has important clinical implications. Because the treatment approaches for depression and anxiety, or a combination of the two disorders vary, identifying the presence or absence of these symptoms is an integral part of assessment which may directly impact treatment (Brady & Kendall, 1992).

#### **Risk Factors**

Evidence exists that implies that internalizing problems in early childhood may

persist into adolescence and even into adulthood (Walters, 1996). There are various common risk factors that are shared among the internalizing disorders. These problems include academic difficulties, poor social relationships, low self-esteem, and suicide. Each risk factor will be examined individually.

## Academic Problems

A depressed child will show more variability in school functioning, depending on the mood of the child, on any given day than a child who is not depressed (Poznanski, 1982). Poznanski also noted that the poor school performance of a depressed child may stem both from a lack of interest in an activity and from difficulty in concentrating. Walters (1996) noted that highly anxious children perform more poorly on achievement measures than less anxious children, and that these adverse affects on performance may increase as children progress through school. Children who experience somatic complaints may also experience academic problems as a result of excessive absenteeism (Last, 1991).

#### Poor Social Relationships

Merrell (1994) noted that social isolation is a major correlate of anxiety and depression. Poor relationships with peers are common among depressed patients, but it is unclear whether or not this is a cause, consequence, or correlate of depression (Beitchman et al., 1992). Reynolds (1990) also proposed that poor social relationships are another risk factor usually associated with depression. He further explained that children experiencing depression often become isolated from their peers and no longer participate in the usual social activities.

## Low Self-Esteem

Low self-esteem is a common characteristic of depressed children (Poznanski, 1982; Reynolds, 1990). Merrell (1994) illustrated that internalizing symptoms and selfesteem are negatively associated. Merrell further noted that self-concept has a strong functional role that may impact such distinct aspects of human development as affect, motivation, and energy level, all of which have solid connections when it comes to internalizing problems. Walters (1996) noted that the literature indicates low self-esteem has been identified as a common factor among children experiencing depression. And it is also suggested that children with somatic complaints experience increased levels of psychological distress.

## Suicide

In 72% of completed suicides, stressful events such as arguments, school problems, and disappointment occurred within 24 hours of the suicide (Beitchman et al., 1992). Depression and depressive thinking are strongest correlates of suicidal behavior (Bettes & Walker, 1986). Reynolds (1992) suggested there is a need for considering depression and suicidal behaviors as two <u>related</u>, but distinct forms of psychopathology. This is in light of the fact that many individuals who are suicidal tend also to be depressed, but many individuals who are depressed are not suicidal. In addition, social isolation, poor academic progress, and disturbed relationships with teachers have also been found to be associated with suicidal behavior (Beitchman et al., 1992).

#### Specific Forms of Internalizing Disorders

This section will focus on specific forms of internalizing disorders: anxiety, depression, somatic complaints, and social withdrawal.

## Childhood Anxiety

According to Morris and Kratochwill (1990), fears are commonly found in children from infancy through adolescence. Those fears seen in infancy typically occur as a reaction to something taking place in the infant's environment. As the child grows older, fears broaden and involve the dark, supernatural figures, and particular persons, objects, and events. As the child continues to grow older, fears turn more toward imaginary figures, objects, and events as well as the future. There are three types of responses that occur when an individual is in a state of anxiety and a person may suffer from any one or a combination of the three. They include subjective feelings (e.g., discomfort, fear, dread), overt behaviors (e.g., avoidance, withdrawal), and physiological responses (e.g., sweating, nausea, general arousal). There are three main types of anxiety disorders in children; they will be discussed individually.

Phobias. A phobia is an intense and persistent fear of specific objects or situations. The fear is uncontrollable and cannot be reasoned away. Common phobias are of animals, blood, and objects in the environment like storms, heights, or water. A phobia may be of a specific situation such as elevators or fear of being in an enclosed space. A child may also have a social phobia, which is a fear of social or performance situations in which embarrassment may occur.

<u>Overanxious Disorder of Childhood</u>. Overanxious Disorder of Childhood is characterized by excessive anxiety and worry that the child finds difficult to control. The worry and anxiety are accompanied by restlessness, being easily tired out, difficulty concentrating, irritability, muscle tension, or disturbed sleep. <u>The Diagnostic and Statistical Manual</u> (4th ed.; American Psychiatric Association, 1994) includes Overanxious Disorder of Childhood with Generalized Anxiety Disorder. Children with Generalized Anxiety Disorder tend to worry excessively about their competence or the quality of their performance. The <u>DSM-IV</u> (1994) further states that children suffering from this disorder are typically overzealous in seeking approval and require excessive reassurance about their performance and their other worries.

Separation Anxiety Disorder. The main feature of Separation Anxiety Disorder is excessive anxiety concerning separation from the home or from those to whom the child is attached. When separated from parents or caregivers, some children may become extremely homesick and uncomfortable to the point of misery and need to return to the parents or caregiver for comfort. They may be reluctant or refuse to attend school or camp, to visit or sleep at friends' homes, or to go on errands (DSM IV, 1994). In addition, there may be physical complaints such as stomachaches, headaches, nausea, and vomiting when separation occurs or is anticipated. The manifestations of the disorder may vary with age. Younger children may not express specific fears of definite threats to parents, home, or themselves. As children get older, worries or fears are often of specific dangers (e.g., kidnaping, mugging). Separation Anxiety Disorder may develop after some life stress, for instance, the death of a loved one or pet, a change in schools, or a

move. Onset may be as early as preschool age and may occur at any time before the age of 18, but onset as late as adolescence is uncommon (DSM IV, 1994).

Prevalence of anxiety disorders. The prevalence for anxiety disorders is relatively high. Bernstein and Borchardt (1991) suggested that anxiety disorders are probably one of the most common, if not the most common category of childhood and adolescent disorders. In a study by Costello (1989), where the prevalence was examined in a clinical sample of children ages 7-11, it was determined that 8.9% of the sample met the criteria for an anxiety disorder. Morris and Kratochwill (1990) reported that generally more girls than boys report an anxiety disorder. However, Beitchman et al. (1992) found that few differences in sex ratios have been observed for anxiety disorders in early childhood with the exception of overanxious disorder, which appears to be slightly more common in boys than in girls. In addition, they report that in later childhood and adolescence, females with diagnosable anxiety disorders outnumber males.

#### Childhood Depression

Childhood depression can be referred to as a mood disturbance continuum characterized by feelings of sadness, inferiority, inadequacy, hopelessness, guilt, or shame. In addition to the sadness, clinically depressed children may also exhibit the following symptoms: (a) a sharply lowered self-esteem, (b) a tendency toward social withdrawal, (c) the loss of the ability to experience pleasure, (d) an inability to concentrate, (e) poor academic performance, (f) erratic or even bizarre behavior patterns, and (g) alterations of biological functions, such as sleeping, eating, or elimination. It has been suggested by Costello (1989) that the prevalence rate of depressive disorders in children and adolescents ranges from about 1% to 5.2%. It is not always clear in the literature whether or not distinctions are made between depression and dysthymic disorders. Depression as a symptom involves a dysphoric mood state such as feeling unhappy or sad, while depression as a disorder involves mood changes along with changes in psychomotor functioning, cognitive performance, and motivation (Merrell, 1994). In addition, the disorder has occurred for a specified period of time and caused a degree of functional incapacity. Depressive disorders are not as common among prepubertal children as they are among adolescents (Beitchman et al., 1992). Beitchman et al. (1992) also reported that there is some controversy about the male to female ratio of depressive disorders among prepubertal children. Most studies have found no sex differences. Among adolescents, however, females show higher rates of depressive disorders than males (Beitchman et al., 1992).

The <u>DSM-IV</u> (1994) notes that certain symptoms such as somatic complaints, irritability, and social withdrawal are particularly common in children, whereas psychomotor retardation, hypersomnia, and delusions are less common in prepuberty than in adolescence and adulthood. In prepubertal children, major depressive episodes occur more frequently in conjunction with other mental disorders such as disruptive behavior disorders, attention-deficit disorders, and anxiety disorders. The <u>DSM-IV</u> (1994) further specifies that depressed adolescents may exhibit the same associated disorders as children, but in addition may have substance-related disorders and eating disorders.

## **Somatization**

Somatization refers to a variety of processes that lead patients to seek medical help for physical symptoms for which there is no apparent physical or organic cause (Campo & Fritsch, 1994). Kellner (1991) defined somatization as occurring when there are one or more physical complaints and appropriate medical evaluation reveals no explanatory physical pathology. Somatization can result in disability and functional impairment in childhood, including difficulty in school, as well as frequent absences (Campo & Fritsch, 1994). There is also evidence which indicates that somatization, particularly in the form of recurrent complaints of pain, is quite common in children and adolescents. However, the available studies are difficult to compare. As noted by Campo and Fritsch (1994), there has been little consistency in the use of instruments and methodology. Assessments have not included the same list of somatic symptoms, have used different criteria for determining when a particular physical symptom is significant, and have been applied to children of different ages.

Campo and Fritsch (1994) determined that headache appears to be the most commonly reported somatic symptom. Recurrent abdominal pain (RAP) is also extremely common, with available studies reporting RAP in 10% to 25% of school-age children and adolescents. Somatization is frequently polysymptomatic, and somatic symptoms appear to cluster in the pediatric population (Garber, Walker, & Zeman, 1991). There is strong empirical evidence for a "somatic complaints syndrome" that is replicable across age and sex groupings (Quay, 1986).

#### Social Withdrawal

There is a good deal of consensus concerning the benefits of early peer interactions. Through peer interaction, children develop the capacity for sensitive perspective taking in interpersonal relationships (Piaget, 1932). Peers also serve as effective models and reinforcers of socially appropriate behavior (Rubin & Mills, 1988). Conversely, poor peer relations may be both a reflection of adjustment problems and a contributor to later difficulties. Childhood peer difficulties are often thought of as predictors of later psychological maladjustment. Even those socially rejected children who are not identified as having psychiatric problems are likely to report high levels of personal unhappiness and loneliness (Dodge, 1989).

The literature on social competence has origins in so many areas of research, there are few agreed-upon criteria for identifying the child who is experiencing problems in social relationships. About 12% of children meet criteria as socially rejected (Dodge, 1989). The criteria include relatively few peer nominations of a child as being liked and many nominations as being disliked. The rate of friendliness is slightly higher among boys than among girls, but this difference has not held up across all studies (Asher & Hymel, 1981).

It is important to note that children with antisocial aggressive behaviors, such as those found in conduct disorders, have a tendency for peer relationship difficulties (McMahon & Wells, 1989). However, as Kauffman (1989) has written, social isolation can result from behavioral excesses (e.g., aggression or hyperactivity) or behavioral deficits (e.g., inability to interact socially). Merrell (1994) further reported that it is the category of behavioral deficits that is most closely linked with internalizing disorders. Children who are socially isolated or withdrawn due to behavioral deficits tend to lack responsiveness to the social initiations of others; basically, they lack the specific social skills to make and keep friends. This characteristic is in contrast to children with antisocial aggressive behaviors, who do not have friends because they intimidate and bully other children. This class of children tends to "push" others away, while internalizing children do not know how to reach out, or may feel too intimidated to do so.

## Internalizing Disorders and Native Americans

In the past, investigators have usually found problems in the delivery of mental health services to members of ethnic minority groups. These problems, according to Sue, Fujino, Hu, Takeuchi, and Zane (1991), include difficulties in performing valid psychological assessments, differential or discriminatory forms of treatment, therapist preferences for client characteristics that place ethnic minorities at a disadvantage, underutilization of services on the part of some ethnic groups, high premature termination rates, and ineffectiveness of traditional mental health services for ethnic minority clients. These issues all seem to fit the current situation for many Native Americans. Additionally, there seems to be a particular lack of services in rural environments, a situation in which many Native Americans live (McDonald, DeLorme, Dahlen, & Wilson, in press).

Many writers have described minority status itself as a stressor, because it is often associated with hostility and prejudice (e.g., Tharp, 1991). Tharp also noted that the status of all minorities is not the same and neither are their characteristic stressors nor responses to them. For instance, Native American and African American children are classified as <u>involuntary minorities</u> (vs. voluntary minorities, whose parents made the conscious decision to come to the United States), and they tend to learn that education does not always lead to economic improvement. Therefore, they may become withdrawn and hostile in school. Long (1983) explained that because of high rates of death and displacement, Crow Indian children objectively experience repeated and traumatic loss; they may suffer a chronic condition of mourning and depression.

An additional factor that may influence Native American children is the degree of acculturation or assimilation. Acculturation is defined as culture change that results from continuous, first-hand contact between two distinct cultural groups (Berry, 1988). A child who is raised with traditional values and customs may respond differently from a child who is raised more assimilated in the Anglo way of life if they were both given a standard battery of tests. One factor that comes into play here is the concept of acculturation stress. This concept refers to one kind of stress, that in which the stressors are identified as having their source in the process of acculturation; in addition, there is often a particular set of stress behaviors that occur during acculturation, such as lowered mental health status, feelings of marginality and alienation, heightened psychosomatic symptom level, and identity confusion (Berry, 1988). For instance, if a Lakota Sioux child is being raised traditionally, the child is taught the value of sharing and to always do what is best for the family and/or tribe. However, when the child goes to a mainstream school with non-Native teachers, the child could be taught to "look out for number one"

and think of one's self first. This shows the mainstream culture's emphasis on individualism and individuality as opposed to the traditional culture's emphasis on group identity. Another influence upon Native Americans is the diversity among tribal groups. There are over 500 federally recognized tribes in the United States, and they all practice differing beliefs and rituals.

After an exhaustive literature search, this investigator found only one documented study that examines depression with Native American children (Manson, Ackerson, Dick, Baron, & Fleming, 1990). This study investigated the use of the Center for Epidemiologic Studies Depression Scale (CES-D) with Native American adolescents in screening for depression. All of the participants were attending a boarding school. According to the scores, 58% of the Native American adolescents were classified as depressed; this is in sharp contrast to the estimated national rate of 4%. Upon examination with other methods of assessment (i.e., other self-report measures, clinical interviews), it was found that the number previously reported was grossly inflated. The authors recommended exercising caution in using the CES-D with Native American adolescents.

## Problems in Assessing Internalizing Disorders with Children

In comparison to externalizing disorders, internalizing disorders are more difficult to detect or to determine the severity of symptoms. What makes internalizing disorders so problematic and difficult to detect is the fact that they are covert, secret, and not easily observed. For instance, according to Reynolds (1990), feelings of subjective misery, hopelessness, fatigue, anhedonia, difficulty sleeping and other symptoms of depression may not be readily observable, particularly in children who may be characterized as shy or withdrawn.

There is growing consensus among researchers regarding the importance of using self-report measures in the assessment of internalizing disorders in children. Kazdin (1990) stressed that self-reports are important in the diagnosis of internalizing disorders because many of the core symptoms reflect subjective feelings and perceptions (for instance emotional discomfort or feelings of distress). Walters (1996) noted that children's feelings and perceptions are central aspects of internalizing problems, and suggested that they are difficult for parents and teachers to accurately and reliably identify. Thus, the use of self-report instruments in the assessment of internalizing disorders of the commonly used self-report instruments for measuring internalizing disorders.

## Children's Depression Inventory

The Children's Depression Inventory (CDI; Kovacs, 1980-1981, 1991) consists of 27 items to measure depressive symptomology for children in the age range of 6-17 years old. Merrell (1994) noted that the CDI was the most widely used and researched child self-report instrument used for depression in the 1980s. Overall, the CDI has good psychometric properties and the research available on this measure is very extensive. The internal consistency has been found to usually be in the mid- to upper .80s. The test-retest reliability of the CDI typically has been found to be in the .70 to .85 range at 1-

week to 2-month intervals and in the same general range at several month intervals. The validity of the CDI has been found to be positively correlated with other measures such as the Revised Children's Manifest Anxiety Scale (RCMAS), Reynolds Child Depression Scale (RCDS), State-Trait Anxiety Inventory (STAIC), and Personality Inventory for Children (Merrell, 1994)

#### Reynolds Child Depression Scale

The RCDS is a self-report measure that assesses depressive symptomology for children in grades three through six (Reynolds, 1989). This measure contains 30 items that are based primarily on depressive symptomology from the <u>DSM-III</u> (American Psychiatric Association, 1980). The RCDS has good psychometric characteristics. It does not have as much research data as the CDI, but still has an adequate amount. Internal consistency has been reported at .92. Test-retest reliability has been reported at .80 at 6-week intervals. Validity for the RCDS has been established through strong correlates with three other measures: the Beck Depression Inventory, the Zung Self-Rating Depression Scale, and the CDI (Merrell, 1994).

#### Revised Children's Manifest Anxiety Scale

The RCMAS (Reynolds & Richmond, 1985) is a 37-item self-report measure for children in the age range of 6-17 years. This instrument is designed to measure trait anxiety, which is the tendency to be anxious across settings and time. The RCMAS has only fair to good psychometric properties, but it also has the advantage of having extensive research available for it. Internal consistency reliability for the RCMAS subscales has been found to range from .50 to .70. Convergent validity with the Children's Anxiety Scale has been shown through correlations ranging from .29 to .69.

## State Trait Anxiety Inventory for Children

The STAIC (Spielberger, 1973) consists of 20 items to measure state anxiety and 20 items to measure trait anxiety. While designed to be used with 9- to 12-year-old children, the manual states that it may be used with younger children. The STAIC has good psychometric properties and also has been extensively researched. Internal consistency for both scales is generally reported in the .80s.

### Youth Self-Report

The Youth Self-Report (YSR; Achenbach, 1991) consists of 119 items and is to be used with children between 11 and 18 years of age. This measure is purported to assess two broad band scales, the internalizing and externalizing problem domains. The YSR appears to have sufficient psychometric characteristics. Test-retest reliability at 1week intervals has been reported at .83 to .87 for broad band and total score reliabilities (Merrell, 1994). The range for narrow band and competence scores is .39 to .83.

Even with recent advances, the available instruments are not sufficient. Most of the instruments are syndrome specific in design and do not assess the broad array of internalizing symptoms, despite the comorbidity problem. The YSR claims to measure internalizing disorders. However, it only goes down to age 11. Therefore, more selfreport measures are needed to assess internalizing symptoms in children.

#### Positive and Negative Affectivity

The constructs of positive and negative affect are now being recognized as increasingly important in the realm of internalizing disorders. Watson and Tellegan (1985) originally proposed this two-dimensional model of affect in an attempt to discriminate empirically between depression and anxiety. Within this two-dimensional model, positive affect (PA) has been defined as "the extent to which a person avows a zest for life" (Watson & Tellegan, 1985, p. 221). Words reflecting high PA include: active, alert, energetic, enthusiastic, interest, joyful, and determined. Conversely, words such as drowsy, dull, fatigued, lethargic, and sluggish reflect low levels of PA. Negative affect (NA) was defined as "the extent to which a person reports feeling upset or unpleasantly aroused" (Watson & Tellegan, 1985, p. 221). The terms distressed, fearful, hostile, and nervous represent high levels of NA, whereas adjectives such as calm, placid, and relaxed reflect low NA.

It needs to be noted that <u>none</u> of the currently available instruments that were reviewed were developed with the concepts of PA and NA in mind. The ISSC is unique in its construction because it includes items reflecting both PA and NA. It is the only instrument that is not syndrome specific.

## CHAPTER III

## METHODS

## Purpose and Objectives

The primary purpose of this project was to determine the level of internalizing symptomology in a sample of Native American children and to compare them with a non-Native American sample. The objective of this project was to answer the following research questions:

1. What is the level of self-reported internalizing symptoms of a Lakota Sioux sample on the ISSC in relationship to that of a matched normative sample?

2. What evidence does the relationship among the various self-report measures of internalizing problems provide for the convergent validity of the ISSC?

3. How well do individual ISSC scores predict group membership, with regard to a Lakota Sioux sample versus a national norm group?

4. How well does the criterion of teacher-nomination of students according to perceived internalizing symptoms predict ISSC scores with the study sample?

## Participants

The participants were Lakota Sioux children from the Pine Ridge Reservation in South Dakota. All participants attended the fourth, fifth, or sixth grades at Crazy Horse School. The target population consisted of 92 individuals, while the total sample obtained consisted of 60 subjects. There were 29 males and 31 females in the final sample. The gender by grade breakdown of the sample is illustrated in Table 1.

All of the children in the sample resided on the reservation and were at least part Lakota Sioux. Sixteen of the children were enrolled in Special Education programs in addition to regular classroom studies. The initial sample consisted of 52 subjects, with 18 of the subjects having one or more parents who had full-time employment. Of the initial sample, 65% of the children had parents who were unemployed. The final sample included 8 more subjects, bringing the total sample size to 60 individuals.

A comparison sample of majority children (Caucasian) was also utilized. The comparison sample was drawn from the Internalizing Symptoms Scale for Children (ISSC) national normative database. It was matched to the Lakota Sioux sample based on the demographic variables of grade level and gender using a randomized-block matching procedure.

### Procedures

Informed consent was obtained prior to any testing. A copy of the consent form is included in Appendix A. Written parental permission was initially acquired by having the teachers of the target subjects hand out permission slips a full week before any testing was scheduled at the school.

However, when the researcher arrived at the testing site, only 36 signed forms in favor of the child participating in the study had been collected. With the help of the home-school liaison, the researcher then took blank forms and went into the community and met with as many parents as possible to obtain consent. This effort resulted in the

## Table 1

	Sex		
Grade	Male	Female	
4th	10	17	
5th	14	6	
6th	5	8	•

Sample Breakdown by Gender and Grade

addition of 16 more subjects eligible to participate in the study.

Testing sessions were conducted on Tuesday, Wednesday, and Thursday of the following week at 10:00 am and ended by 12:00 pm each of the 3 days. The fourth grade was tested on Tuesday, the fifth on Wednesday, and the sixth on Thursday. The researcher oversaw all of the testing. On Friday of the testing week, a party was sponsored by the researcher for all the fourth, fifth, and sixth grades at Crazy Horse School. Each child participated in a cake and ice cream social.

The procedure consisted of administering three self-report social-emotional measures to the participants. The three measures included the Internalizing Symptoms Scale for Children (ISSC), the STAIC, and the RCDS. All subjects were given all three measures in one packet. However, each grade was given the measures in a specific order that was different from the other grades (counter-balanced). The comparison sample of majority children had only ISSC scores.

Fifty-two Lakota Sioux children tested in this manner. All 52 subjects were

included in all statistical analyses. The researcher returned to the sample site once again 6 months later and obtained consent from eight more parents. The reason for obtaining more subjects was because there were only 6 teacher-nominated subjects out of a possible 18 for the comparison between means of the teacher-nominated internalizers versus noninternalizers. These additional 8 subjects made for a stronger sample of teachernominated internalizers because now the were 14 out of 18. These 8 subjects were administered the ISSC only, and these 8 subjects brought the total in the sample to 60. These additional 8 subjects were included in all analyses except the convergent validity of the ISSC with the STAIC and RCDS. This concluded all formal testing. In obtaining the teacher nominations for students who were classified as internalizers, an inservice on internalizing symptoms was held with all teachers. The inservice was held prior to any testing. It began with the researcher going over common signs for internalizing symptoms and then answering questions the teachers may have had in regard to their role in this matter. Teachers then supplied three names of prospective internalizers from their class list from whom consent was already obtained.

#### Instruments

#### Internalizing Symptoms Scale for Children

The ISSC (Merrell & Walters, 1996) is a self-report measure for use in screening internalizing symptoms of children in grades three through six. The high degree of overlap among various internalizing symptoms and disorders (e.g., Brady & Kendall, 1992; Reynolds, 1992), along with the fact that most of the self-report measures for

internalizing symptoms in children tend to be aimed at a specific syndrome (e.g., depression or anxiety), rather than broadly aimed at the larger construct of interrelated internalizing symptoms (Merrell, 1994), led to the development of the ISSC. Therefore, the specific purpose for which the ISSC was developed was to provide a comprehensive self-report instrument for intermediate elementary-age children to assess the symptoms of various internalizing symptoms (e.g., depression, anxiety, social withdrawal, somatic complaints) in a combined manner.

The ISSC contains 48 items that reflect either the presence or absence of a wide variety of internalizing symptoms. Children respond to each item by selecting one of the following statements that most accurately reflects how true they consider the statement to be for them: <u>Never True</u>, <u>Hardly Ever True</u>, <u>Sometimes True</u>, and <u>Often True</u>. Completion of the ISSC protocol takes most children an average of 15-18 minutes. Approximately two thirds of the items are worded in a manner that suggests the presence of a particular internalizing characteristic, while approximately one third of the items are presented in a manner that indicates either the absence of a specific internalizing symptom, or the presence of positive affect or cognitions incompatible with specific internalizing symptoms. Item responses are keyed to a 4-point scale (ranging from 0 to ... 3), where higher values always indicate greater internalizing symptoms.

Extensive and methodologically rigorous procedures were utilized during the development of the ISSC items, to ensure a strong representation of the domain of children's internalizing symptoms and, therefore, content validity of the instrument. For example, item development and selection procedures were based on current theories and

empirical evidence regarding the internalizing dimension of child psychopathology (e.g., Cicchetti & Toth, 1991; Quay, 1986; Quay & LaGreca, 1986), involved extensive literature search procedures, and utilized a panel of experts to determine appropriateness and content validity of items.

Factor analytic studies have indicated that the ISSC includes two factors (Merrell & Crowley, in press). Negative Affect/General Distress is the first factor, and contains items that indicate the presence of specific internalizing symptoms or emotional distress. Positive Affect is the second factor, and contains items that indicate the absence of internalizing symptoms/emotional distress, or the presence of positive affect and cognitions incompatible with emotional distress. These factor analytic findings are compatible with those of previous researchers (e.g., Clark, Beck, & Stewart, 1990; Watson, Clark, & Carey, 1988) who have found that positive and negative expressions of affectivity are separate components that make unique contributions to the development or prevention of internalizing disorders such as depression and anxiety; they are not merely polar opposites along a continuum.

Based on analyses of the initial standardization sample of over 2,000 cases, the ISSC has an internal consistency reliability (coefficient alpha) of .92, with the two subscales having internal consistency reliability coefficients of .90 and .86, respectively. The ISSC has been shown to display sensitivity towards gender differences in internalizing symptoms (Merrell & Dobmeyer, 1996). Convergent construct validity of the ISSC as a measure of internalizing symptoms has been demonstrated through strong correlations (.71 to .86) with the internalizing broad band score of the YSR, and through moderate to strong correlations between the ISSC and measures of specific internalizing syndromes, including the CDI (.60 to .76 correlations with CDI total score) and the RCMAS (.56 to .79 correlations with RCMAS total score; Merrell, Anderson, & Michael, 1997). A copy of the ISSC protocol is found in Appendix B.

#### State-Trait Anxiety Scale for Children

The STAIC (Speilberger, 1973) was initially developed as a research tool for investigating anxiety in elementary school children. It consists of two separate self-report scales for measuring two distinct anxiety concepts: state anxiety (A-state) and trait anxiety (A-trait). The STAIC A-state scale consists of 20 statements that inquire how children feel at a particular moment in time. The STAIC A-trait scale also consists of 20 statements, but participants respond to these items by indicating how they generally feel. The A-state scale is designed to measure transitory anxiety states, basically, subjective, consciously perceived feelings of apprehension, tension, and worry that vary in intensity and fluctuate over time. The A-trait scale measures relatively stable individual differences in anxiety proneness, basically, differences between children in the tendency to experience anxiety states. The STAIC A-state and A-trait scale are printed on opposite pages of a single-page test form.

While especially constructed to measure anxiety in 9- to 12-year-old children, the STAIC may also be used with younger children with average or above average reading ability and with older children who are below average in ability. The STAIC is a self-administered scale and has no time limits. Each item has a 3-point scale.

The normative data for the STAIC are based on 1,554 elementary students in the fourth through sixth grades. Both Black and White children are represented. According to the manual, the alpha reliability internal consistency coefficients for A-state are .82 for males and .87 for females; the coefficients for A-trait are .78 and .81, respectively. The test-retest reliability coefficients for A-trait are .65 for males and .71 for females; coefficients for A-state are .31 and .47, respectively. Concurrent validity of the STAIC A-trait is based on correlations between the STAIC A-trait scale and both the CMAS and GASC. The STAIC A-trait correlated .75 with the CMAS and .63 with the GASC. A copy of the STAIC protocol is found in Appendix B.

### Revnolds Child Depression Scale

The RCDS (Reynolds, 1989) is a self-report measure designed to assess depressive symptomatology in children Grades three through six. According to the manual, the RCDS is designed as a measure of clinically relevant levels of depressive symptomatology in individual children; a screening measure to identify depressed children in school-based and clinical populations; a tool for use in research on depression and related constructs; and, an instrument to evaluate treatment outcomes (Reynolds 1989). The RCDS consists of 30 items, 29 of which utilize a 4-point Likert-type response format and one that uses a response format consisting of five faces depicting emotions ranging from happy to sad. The child is asked to endorse whether the symptom-related item has occurred: <u>Almost Never</u>, <u>Sometimes</u>, <u>A Lot Of The Time</u>, or <u>All The Time</u>. Seven of the 29 items are reverse scored to provide a check for response sets and inconsistent responding. Responses on the 29 Likert-type items are weighted from 1 to 4 points. The response to the "faces" item is weighted 1 to 5 points. The total score on the RCDS can range from 30 to 121 (Reynolds, 1989).

RCDS norms were based on a standardization sample of 1,620 elementary school children in the midwestern and western areas of the U.S. The normative sample included approximately 30% ethnic minority children from urban, suburban, and rural areas. Internal consistency coefficients ranged from .79 to .91 within and across grades, gender. and ethnic groups, as well as for a subset of learning disabled children. Two test-retest studies have yielded reliability coefficients of .82 and .85, respectively. According to Rohrbeck (1992), content validity is present because items were developed to reflect the DSM-III-R (APA, 1984) symptoms of depression. Criterion-related validity is supported by comparing RCDS performance with scores on two other measures of depression in children. In all instances, correlations in the mid-.70s were obtained. A copy of the RCDS protocol is found in Appendix B.

### CHAPTER IV

#### RESULTS

### **Correlations Among Self-Report Tests**

To evaluate relationships between the ISSC and the other self-report tests used with the study sample (RCDS and STAIC), bivariate Pearson product-moment correlations were computed. These correlations were computed between the ISSC total and factor scores, and the various scores of the comparison measures. A two-tailed alpha level of .05 was used to determine statistical significance of the correlations. These correlations were conducted primarily to determine the convergent construct validity of the ISSC with the two comparison instruments, specifically with a sample of Lakota Sioux children.

### Internalizing Symptoms Scale for Children and Reynolds Child Depression Scale

In comparing the ISSC and RCDS, the vast majority of correlation coefficients were statistically significant at the p < .001 level. These coefficients are shown in Table 2. Correlations between the ISSC total score and the RCDS subscale scores ranged from .32 to .75, whereas the total scores of the two measures were found to correlate at .79. Correlations between ISSC Factor 1 (negative affect/general distress) and the RCDS subscales ranged form .27 to .68, and a .76 correlation was obtained between ISSC Factor 1 (negative affect/general distress) and the RCDS total score. The correlations between ISSC Factor 2 (positive affect) and the RCDS subscales ranged from .26 to .58, with a .52

# Table 2

Correlations Between ISSC Raw Scores and RCDS Raw Scores

		ISSC	
	Factor 1 (negative affect/ general distress)	Factor 2 (positive affect)	Total
RCDS Factor 1 Despondencyworry	.65***	.37**	.65***
RCDS Factor 2 Demoralization general despondency	.68***	.58***	.75***
RCDS Factor 3 Externalized somatic vegetative depression	.53***	.32*	.53***
RCDS Factor 4 Dysphoric mood pessimism	.45**	.52***	.56***
RCDS Factor 5 Anhedonia	.27	.26	.31**
RCDS Total Total depression score	.76***	.52***	.79***

correlation between ISSC Factor 2 (positive affect) and the RCDS total score. The relationship between these two measures could be characterized as moderately strong, particularly when total scores are considered.

## Internalizing Symptoms Scale for Children and State Trait Anxiety Inventory for Children

The correlations obtained from comparing the ISSC and the STAIC are presented in Table 3. Correlations between the ISSC and the STAIC state scale were .50 with the ISSC total score, and .39 and .55 with the two ISSC factor scores. Correlations between the ISSC and the STAIC trait scale were .64 with the ISSC total score, and .61 and .41 with the two ISSC factor scores. These results indicate that the ISSC total score seems to be more closely correlated with trait anxiety, rather than state anxiety.

## Internalizing Symptoms Scale for Children Scores of Study Sample Versus Matched Normative Sample

For the Lakota Sioux study sample, the mean for the ISSC Factor 1 (negative affect/general distress) score was 39.68 with a standard deviation of 19.59. The mean for the ISSC Factor 2 (positive affect) score was 16.08 with a standard deviation of 8.44. The ISSC total score mean for the study sample is 52.33, and the standard deviation is 21.83. In reference to the matched comparison sample from the national normative data base, the mean for Factor 1 (negative affect/general distress) is 43.88 and the standard deviation is 15.76. For Factor 2 (positive affect), the mean is 13.07 and the standard deviation is 9.52. While the mean for the total score for the matched sample is 53.43 and the standard deviation is 20.63. This information is presented in Table 4.

As these data indicate, the ISSC scores of the study sample and the matched comparison group are relatively similar. The ANOVA results indicated that the differences between the ISSC scores of the two groups were not statistically significant.

### Table 3

		ISSC	
	Factor 1 (negative affect/ general distress)	Factor 2 (positive affect)	Total
STATER	.39*	.55**	.50**
TRAITR	.61**	.41*	.64**

Correlations Between ISSC Raw Scores and STAIC Raw Scores

### Table 4

ISSC Descriptive Statistics of Study Sample and Comparisons with a Matched Sample from the Normative Group Including ANOVA Results and Effect Sizes

	Study	sample	Match	ed sample		
ISSC score	м	<u>SD</u>	M	SD	E	<u>d</u>
Factor 1 (negative affect/ general distress)	39.68	19.59	43.88	15.76	1.67 (ns)	.27 (sm)
Factor 2 (positive affect)	16.08	8.44	13.07	9.52	3.37 (ns)	.32 (sm)
Total score	52.33	21.83	53.43	20.63	.08 (ns)	.05 (ns)

<u>Note.</u> ns = not significant; sm = small.

The effect size ( $\underline{d}$ ) estimates of the ISSC scores of the two groups are more complex. Affect size estimates were calculated using the  $\underline{d}$  method suggested by Cohen (1988) for power analysis. Although the  $\underline{d}$  value of the difference between the ISSC total scores is weak (.08 = not significant), the ISSC factor scores of the two groups evidenced differences of a small, but practically important magnitude, ranging from about one fourth of a standard deviation (.27, Factor 1 [negative affect/general distress]) to about one third of a standard deviation (.32, Factor 2 [positive affect]). These effect size estimates indicate that the children in the study sample were less likely than the children in the matched comparison sample to report <u>either</u> negative affect/general distress symptoms or signs of positive affect. The ANOVA source table for this analysis is found in Appendix C.

## **Discriminant Analysis**

The overall separation of the two groups (study sample and matched sample) was tested using a two-group linear discriminant function analysis, a multivariate procedure used to determine the accuracy of group classification based on the statistical properties of test scores. In other words, the question answered in the discriminant function is essentially "how well do the item scores of the ISSC separate and classify the study sample and the matched sample?" The essential feature of discriminant analysis, according to Borg and Gall (1989), is the prediction of group membership, so in this analysis, group membership (study vs. matched) served as the grouping variable, and the ISSC-item scores served as the classification variables. The resulting discriminant function was significant, indicating that the ISSC scores separated and classified the two groups in a statistically significant manner: Wilks' Lambda  $\underline{F} = .44$ ,  $\underline{p} < .0001$ . The classification results table from the discriminant analysis indicated that overall, 90.0% of the children were classified correctly into their respective groups based solely on the

statistical properties of the ISSC scores. The classification results from this analysis are presented in Table 5.

The resulting structure matrix from the discriminant analysis indicated that there were three ISSC items that were more robustly associated with the separation of the two groups, than with the other ISSC items (see Table 6). These items include "I worry about things," "I have lots of energy," and "Bad things happen to me." These items could be considered as "critical" items in the separation of the two groups, based on their correlations of .20 and higher with the discriminant function.

# Teacher-Nominated "Internalizers" Compared with "Noninternalizers"

In examining the ISSC scores of teacher-nominated "internalizers," it was found that they had a mean of 39.60, and a standard deviation of 20.00 on Factor 1 (negative affect/general distress). On Factor 2 (positive affect), they had a mean of 15.60 and a standard deviation of 7.90. The mean of their total score was 51.80, with a standard deviation of 21.50. These scores differ slightly from the noninternalizers in that the noninternalizers' mean and standard deviation on Factor 1 (negative affect/general distress) were 39.90 and 18.90, respectively. On Factor 2 (positive affect), the noninternalizers received a mean of 17.20 and a standard deviation of 9.90. Their total ISSC score is 55.50, with a standard deviation of 23.40. This information is located in Table 7.

As the data prescribed in Table 7 indicate, the ISSC scores of the teachernominated "internalizers" did not differ significantly from the ISSC scores of those

# Table 5

Actual group	No. of cases	Comparison	Study
Matched comparison group	60	54 90.0%	6 10.0%
Study sample	60	6 10.0%	54 90.0%

# Classification Results for Discriminant Analysis

# Table 6

Structure Matrix

Critical items	Correlation with discriminant function
Item 9, I have lots of energy.	.25
Item 2, I worry about things.	.21
Item 44, Bad things happen to me.	.20

children who were not nominated as "internalizers" by their teachers. The ANOVA source tables for this analysis are located in Appendix C.

# Table 7

ISSC Scores of Teacher-Nominated "Internalizers" (n=14) and Noninternalizing (n=46)

	Interna	Internalizing		Noninternalizing		ng Noninternalizing		
ISSC score	M	<u>SD</u>	M	<u>SD</u>	E	₫		
Factor 1 (negative affect/ general distress)	39.6	20.00	39.90	18.90	.002 (ns)	.02 (ns)		
Factor 2 (positive affect)	15.60	7.90	17.20	9.90	.44 (ns)	.16 (ns)		
Total	51.80	21.50	55.50	23.40	.07 (ns)	.16 (ns)		

Students from the Study Sample, with ANOVA Results and Effect Size Estimates

<u>Note.</u> ns = not significant

# CHAPTER V DISCUSSION

#### **Research Questions**

In regard to the first research question, "What is the level of self-reported internalizing symptoms of the Lakota Sioux sample on the ISSC in relationship to that of a matched normative sample?," one must first look at the means of the two groups. Factor 1 (negative affect/general distress), the presence of negative affect, shows a mean score for the Lakota Sioux sample of 39.68, whereas the mean score for the matched sample was 43.88. These data show that the Lakota Sioux sample reported fewer symptoms of negative affect. A small, but meaningful, effect size (.27) was found based on these scores.

For Factor 2 (positive affect), the mean for the Lakota Sioux sample was 16.08. The mean for the matched sample on Factor 2 (positive affect) was 13.07. These data show that the Lakota Sioux sample also reported the presence of fewer positive affect symptoms in comparison to the matched sample. This difference resulted in a small, but meaningful, effect size of .32. It is important to note that there is no readily apparent reason for these meaningful effect sizes on ISSC Factor 1 (negative affect/general distress) and Factor 2 (positive affect). It may be due to specific cultural differences between the two groups, which are unknown at this time. In looking at the two groups' total overall mean score on the ISSC, Lakota Sioux sample = 52.33 and matched sample = 53.43, the effect size is nonsignificant. Overall the two groups received a total score in which the difference was not statistically significant. So even though there were small effect sizes on the two factor scores, they "canceled each other out" to produce a similar overall mean score.

The second research question is, "What evidence does the relationship among the various self-report measures of internalizing problems provide for the convergent validity of the ISSC?" The ISSC Factor and Total scores show they are moderate to strongly correlated with the RCDS subscales. The Pearson product-moment correlations ranged from .31 to .75 between the ISSC total score and the RCDS subscales. One can surmise from this information that the ISSC and the RCDS are essentially measuring similar but slightly differing constructs (broad band internalizing symptoms for the ISSC and depression for the RCDS).

In looking at the ISSC in comparison to the STAIC, the ISSC Total Score correlations are .50 with state anxiety and .64 with trait anxiety. These are moderate to strong correlation coefficients, and show that the ISSC is capable of assessing anxiety. It is interesting to note that state anxiety correlates slightly higher with Factor 2 (positive affect) of the ISSC. In turn, trait anxiety was correlated slightly higher with Factor 1 (negative affect/general distress) of the ISSC. In all, the two measures specific for depression and anxiety correlated with the ISSC to the expected degree to prove its convergent construct validity as a broad band measure of internalizing symptoms.

In looking at the total scores of the self-report measures among the Lakota Sioux sample, there were no significant patterns in the reporting. Overall, all the total means were in the normal range on all three measures, and very similar to the normative sores reported in the various test manuals.

Research question number three is, "How well do individual ISSC scores predict group membership, with regard to a Lakota Sioux sample versus national norm group?" The answer to this question was developed in the discriminant analysis. Discriminant analysis is used for classifying subjects into groups. According to the discriminant analysis results, 90% of both the Lakota Sioux sample and the matched sample comparison were correctly classified into their respective group. In other words, both groups responded in a way that was significant to that particular group. There were 60 subjects in each group, and 54 of each group responded in a way that would predict them as belonging to their particular group and not the other group.

There were three critical items on the ISSC that especially distinguished the two groups in their pattern of responding. Two of the items deal with negative affect, and one deals with positive affect. The two items referring to negative affect are "I worry about things" and "bad things happen to me." The item that refers to positive affect is "I have lots of energy." It is difficult to say exactly why these three items are the ones that best distinguish the two groups in their response manner.

The fourth research question is "How well does the criterion of teacher nomination of students according to perceived internalizing symptoms predict ISSC scores with the study sample?" It can be noted that the mean ISSC score for the teachernominated internalizers (Total ISSC = 51.80) is actually lower than for the noninternalizers (55.50); however, these score differences were not statistically significant or clinically meaningful. In this study, having the teachers provide three

41

names of students whom they thought qualified as internalizers did not provide notable results in terms of identifying students with internalizing symptoms.

### Implications for Clinical/Educational Practice

As seen from the correlations with other criterion measures, the ISSC appears to be a promising instrument for assessing internalizing symptoms. This statement is encouraging in that the ISSC covers a broad range of internalizing symptoms rather than specific internalizing disorders. This is important given the fact that internalizing symptoms often co-occur.

In using the ISSC with specific groups of people with whom little research has been conducted, it is important to look at item-level responses and group patterns in responses as compared to just looking at total scores. The study sample of Lakota Sioux children had unique responses to some of the items and subscales of the ISSC. Just looking at the total score would not reveal these interesting patterns.

A benefit of using the ISSC is the fact that it does not just measure internalizing symptomology. It also measures positive and negative affect. Therefore, it is a more universal assessment instrument. It has been documented (Merrell & Walters, 1996) that in cases where it is possible to distinguish between depression and anxiety in individuals, a key distinguishing feature is the absence of positive affect. In general, if a person is anxious and depressed, he or she tends to report negative affect. Depressed individuals also are likely to report a lack of positive affect. However, individuals reporting high degrees of anxiety may not necessarily be lacking in positive affect. Thus, measures of positive and negative affect may be important in the overall assessment and classification of internalizing disorders.

### Relationship to Previous Research

There have been no previous studies found that assess internalizing symptoms in Lakota Sioux children. A computer database utilizing ERIC and Psych-Lit was employed, but no specific studies or closely related studies were identified. There was one study by Merrell et al. (1997) that compared the ISSC with the YSR (Achenbach, 1991), CDI (Kovacs, 1991), and RCMAS (Reynolds & Richmond, 1985). It was found that 74% of the variance of the ISSC is accounted for in the YSR, based on the coefficient of determination. Merrell et al. (1997) also found that the correlations between the ISSC and the CDI could be characterized as moderate to strong. The correlation coefficient between the ISSC Total Score and the Total Depression Score was .75; therefore, two instruments appear to measure strongly related but slightly different constructs (i.e., depressive symptomology vs. broad internalizing symptomology). In looking at the RCMAS, the correlation coefficient between the ISSC Total Score and the Total Anxiety Score was .78. This is a moderate to strong relationship, but both instruments measure slightly differing constructs. What these three studies do is to lend credence to the fact that the ISSC has demonstrated convergent construct convergent validity, as shown in the present study.

### Limitations of the Study

One of the most salient limitations of the current study is the limited sample, both in size and geography. The total sample size of Lakota Sioux children was 60 individuals. This was 65% of the possible population. This sample does not reflect all Lakota Sioux children who may be located on several different reservations and different cities. This factor ties in to the geographical limitations of the study. This particular sample came from one specific school on a particular reservation. There are numerous schools located on different reservations located throughout South Dakota.

Another limitation is the fact that a volunteer sample was used. There might have been something decidingly unique about the students whose parents granted consent for participation versus those parents who refused to grant consent. In addition, it took two trips to the school in order to obtain enough consent forms to provide an adequate sample size. All children took consent forms home at least once, and some took them home twice. This procedure still did not guarantee consent, since many of the parents had to be contacted personally with a third consent form provided by the researcher.

The final limitation is the fact that only self-report measures and teacher nominations were used. Ideally, to gather the most salient information, clinical/diagnostic interviews would be utilized, and perhaps parent/teacher rating scales as well.

### **Recommendations for Further Research**

The first recommendation for future research would be for a larger and broader sample size. With a larger sample, more concrete conclusions could be generalized to a larger population. In taking this point one step further, it would be interesting to utilize more than one specific Indian tribe. For instance, one could compare two different tribes. such as a northern tribe and a southern tribe. This would show how different tribes of Native American children respond to self-report affective items. For instance, the northern tribes tend to be more acculturated than the southern tribes (Carolyn Barcus, personal communication, fall, 1992).

In addition, if a researcher would use more extensive assessment methodology, it would strengthen future studies. It would be very useful, for instance, to conduct clinical/diagnostic interviews in order to gain more in-depth information about each subject. The last recommendation would be to look at the assessment links to intervention strategies for Native American children. What specific techniques would be used based on the pattern of responding to the assessment measures? For instance, if there is a unique pattern of responding, one could learn more about the culture and that may give insights to why a particular pattern is evident. This in turn would affect the course of therapy if there was something about the culture that needed to be considered.

Another area of future research would be to examine in more depth the relationship of the ISSC with the STAIC. It could be further investigated as to why and/or how the ISSC total score is more closely associated with trait anxiety, and Factor 2

45

(positive affect) is more closely associated with state anxiety.

In sum, the present investigation provides some unique new information on selfreported internalizing characteristics of Lakota Sioux children, as well as new validity evidence for the ISSC. As with virtually all investigations, there were flaws in the design and implementation of this study that somewhat limit the confidence with which the results may be generalized. Mental health of Native American children and improvements in child social-emotional assessment are both important endeavors. Future research that builds on the present study may help solve some of the continuing problems in these areas.

#### REFERENCES

Achenbach, T. (1982). Developmental psychopathology (2nd ed.) New York: Wiley.

- Achenbach, T. (1991). <u>Manual for the Youth Self-Report and 1991 profile</u>. Burlington: University of Vermont, Department of Psychiatry.
- Achenbach, T., & Edelbrock, C. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. <u>Psychological Bulletin, 85(6)</u>, 1275-1301.
- American Psychiatric Association (1980). <u>Diagnostic and statistical manual of mental</u> <u>disorders</u> (3rd ed.). Washington, DC: Author.
- American Psychiatric Association (1987). <u>Diagnostic and statistical manual of mental</u> <u>disorders</u> (3rd ed., rev.). Washington, DC: Author.
- American Psychiatric Association (1994). <u>Diagnostic and statistical manual of mental</u> <u>disorders</u> (4th ed.). Washington, DC: Author.
- Asher, S., & Hymel, S. (1981). Children's social competence in peer relations: Sociometric and behavioral assessment. In J. Wine & M. Smye (Eds.), <u>Social</u> <u>competence</u> (pp. 125-157). New York: Guilford.
- Beitchman, J., Inglis, A., & Schachter, D. (1992). Child psychiatry and early intervention: II. The internalizing disorders. <u>Canadian Journal of Psychiatry, 37</u>, 234-239.

Bernstein, G., & Borchardt, C. (1991). Anxiety disorders of childhood and adolescence: A critical review. Journal of the American Academy of Child and Adolescence <u>Psychiatry, 30(4)</u>, 519-532.

Berry, J. W. (1988). Acculturation and psychological adaptation: A conceptual overview.
In J. W. Berry & R. C. Annis (Eds.), <u>Ethnic psychology. Research and practice</u> with immigrants, refugees, native peoples, ethnic groups, and sojourners (pp. 41-52). Berwyn, PA: SWETS North America.

Bettes, B., & Walker, E. (1986). Symptoms associated with suicidal behavior in childhood and adolescence. Journal of Abnormal Child & Adolescent Behavior, <u>14</u>, 591-604.

Borg, W. R., & Gall. M. (1989). Educational research. New York: Longman.

Brady, E., & Kendall, P. (1992). Comorbidity of anxiety and depression in children and adolescents. <u>Psychological Bulletin, 111</u>, 244-255.

Campo, J., & Fritsch, S. (1994). Somatization in children and adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 33(9), 1223-1233.

- Cicchetti, D., & Toth, S. (1991). A developmental perspective on internalizing and externalizing disorders. In D. Cicchetti & S. Toth (Eds.), <u>Internalizing and</u> <u>externalizing expressions of dysfunction</u> (pp. 1-19). Hillsdale, NJ: Erlbaum.
- Clark, D., Beck, A., & Stewart, B. (1990). Cognitive specificity and positive-negative affectivity: complementary or contradictory views of anxiety and depression? Journal of Abnormal Psychology, 99, 148-155.

Cohen, J. (1988). <u>Statistical power analysis for the behavioral sciences</u> (2nd ed.). Hillsdale, NJ: Erlbaum.

- Costello, E. (1989). Child psychiatric disorders and their correlates: A primary care pediatric sample. Journal of the American Academy of Child and Adolescent <u>Psychiatry, 28, 851-855.</u>
- Dodge, K. (1989). Problems in social relationships. In E. Marsh & R. Barkley (Eds.), <u>Treatment of childhood disorders</u> (pp. 222-244). New York: Guilford.
- Garber, J., Walker, L., & Zeman, J. (1991). Somatization symptoms in a community sample of children and adolescents: Further validation of the children's somatization inventory. <u>Psychological Assessment: A Journal of Consulting and</u> <u>Clinical Psychology, 3</u>, 588-595.
- Kauffman, J. (1989). <u>Characteristics of behavior disorders of children and youth</u> (4th ed.). Columbus, OH: Merrill.

Kazdin, A. (1990). Assessment of childhood depression. In A. M. La Greca (Ed.), <u>Through the eyes of the child: Obtaining self-reports from children and</u> <u>adolescents</u> (pp. 189-233). Boston: Allyn & Bacon.

- Kellner, R. (1991). <u>Psychosomatic syndromes and somatic symptoms</u>. Washington, DC: American Psychiatric Press.
- Kovacs, M. (1980-81). Rating scales to assess depression in school-aged children. Acta Paedapsychiatrica, 46, 305-315.
- Kovacs, M. (1991). <u>The Children's Depression Inventory (CDI)</u>. North Tonawanda, NY: Multi-Health Systems.

LaFromboise, T. (1989). American Indian children and adolescents. In J. Gibbs & L.

Huang (Eds.), Children of color (pp. 114-147). San Francisco, CA: Jossey-Bass.

- Last, C. (1991). Somatic complaints in anxiety disordered children. Journal of Anxiety Disorders, 5, 125-138.
- Long, K. (1983). The experience of repeated and traumatic loss among Crow Indian children: Response patterns and intervention strategies. <u>American Journal of Orthopsychiatry, 52, 116-126</u>.
- Manson, S., Ackerson, L., Dick, R., Baron, A., & Fleming, C. (1990). Depressive symptoms among American Indian adolescents: Psychometric characteristics of the Center for Epidemiologic Studies Depression Scale (CES-D). Journal of <u>Consulting and Clinical Psychology</u>, 2(2), 231-237.
- McDonald, J. D., DeLorme, E., Dahlen, B., & Wilson, D. (in press). Completing the circle: American Indian health training programs at the University of North Dakota. <u>Federal Practitioner</u>.
- McMahon, R., & Wells, K. (1989). Conduct disorders. In E. Mesh & R. Berkley (Eds.), <u>Treatment of childhood disorders</u> (pp. 73-131). New York: Guilford Press.
- Merrell, K. (1994). Assessment of behavioral, emotional, and social problems. White Plains, NY: Longman.
- Merrell, K. W., Anderson, K. E., & Michael, K. D. (1997). Convergent validity of the Internalizing Symptoms Scale for Children with three self-report measures of internalizing problems. Journal of Psychoeducational Assessment, 15, 56-66.

- Merrell, K., & Crowley, S. (in press). Development and factor structure of a self-report measure for assessing internalizing symptoms of elementary-age children. <u>Psychology in the Schools.</u>
- Merrell, K., & Dobmeyer, A. (1996). An evaluation of gender differences in internalizing symptoms of children on the Internalizing Disorders Evaluation Scale for Children. Journal of Psychoeducational Assessment, 14, 196-207.
- Merrell, K., & Walters, A. (1996). <u>Internalizing Symptoms Scale for Children: Users</u> <u>guide and technical manual</u>. Logan: Department of Psychology, Utah State University.
- Morris, R., & Kratochwill, T. (1990). <u>The practice of child therapy.</u> Boston: Allyn & Bacon.
- Piaget, J. (1932). The moral judgement of the child. New York: Free Press.
- Poznanski, E. (1982). The clinical phenomenology of childhood depression. <u>American</u> <u>Journal of Orthopsychiatry, 52</u>(2), 308-313.
- Quay, H. (1986). Classification. In H. Quay & J. Werry (Eds.), <u>Psychopathological</u> <u>disorders of childhood</u> (3rd ed., pp. 1-34). New York: Wiley.
- Quay, H., & LaGreca, A. (1986). Disorders of anxiety, withdrawal, and dysphoria. In
  H. Quay & J. Werry, (Eds.). <u>Psychological disorders of childhood</u>. (3rd ed., pp. 73-110). New York: Wiley.
- Reynolds, C., & Richmond, B. (1985). <u>Revised Children's Manifest Anxiety Scale</u>. Los Angeles: Western Psychological Services.

- Reynolds, W. (1989). <u>Reynolds Child Depression Scale</u>. Odessa, FL: Psychological Assessment Resources.
- Reynolds, W. (1990). Introduction to the nature and study of internalizing in children and adolescents. <u>School Psychology Review</u>, 19(2), 137-141.

Reynolds, W. (1992). The study of internalizing disorders in children and adolescents.
In W. Reynolds (Ed.), <u>Internalizing disorders in children and adolescents</u> (pp. 1-18). New York: Wiley.

- Rohrbeck, C. (1992). Reynolds Child Depression Scale. In J. Kramer & J. Conoley (Eds.), <u>The eleventh mental measurements yearbook</u> (pp. 769-771). Lincoln: University of Nebraska Press.
- Rubin, K., & Mills, R. (1988). The many faces of social isolation in childhood. Journal of Consulting and Clinical Psychology, 56(6), 916-924.
- Speilberger, C. (1973). <u>State-trait anxiety for children.</u> Palo Alto, CA: Consulting Psychologists Press.
- Sue, S., Fujino, D., Hu, L., Takeuchi, D., & Zane, N. (1991). Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis. Journal of Consulting & Clinical Psychology, 59(4), 533-540.

Tharp, R. (1991). Cultural diversity and treatment of children. Special section: Clinical child psychology: Perspectives on child and adolescent therapy. <u>Journal of</u> <u>Consulting and Clinical Psychology, 59</u>(6), 799-812. Walters, A. (1996). <u>Development and preliminary validation of a self-report instrument</u> for assessing internalizing problems in children. Unpublished doctoral dissertation, Utah State University, Logan.

Watson, D., Clark, L., & Carey, G. (1988). Positive and negative affectivity and their relation to anxiety and depressive disorders. <u>Journal of Abnormal Psychology</u>, <u>97</u>, 346-353.

Watson, D., & Tellegan, A. (1985). <u>Toward a consensual structure of mood.</u> <u>Psychological Bulletin, 98,</u> 219-235.

# APPENDICES

Appendix A: Consent Form

#### August 1, 1996

#### Dear Crazy Horse School Parent:

I am seeking permission from the parents of all the students in grades four, five, and six for these students to participate in a screening activity for the purpose of establishing validity for a new psychological test for children. This new test will ultimately be used to help identify symptoms of depression and anxiety in children in grades three through six. The purpose of this particular study will be to see how a specific sample of American Indian children compare with the national normative database.

For the screening activity, the students in each classroom will be asked to take about 45 minutes to respond to a number of questions regarding their mood, the way the feel about themselves, and certain behaviors they may display that are related to depression and anxiety. Examples of actual statements ing the screening include "I am shy," "I worry about things," "I am cheerful," "I feel very tired," and "I am happy."

Participation will be completely voluntary. Any student who does not wish to participate will be excused from the activity without consequence, and no child will participate with out prior written consent from the parent. I believe there is very minimal risk in this activity, and children who participate will not be personally identified in any way. They will be providing information regarding their age, grade, and gender, code numbers will be used and children will be instructed to not put their names on the tests. All data will be stored in a locked file cabnet in a locked room. Only Dr. Merrell and myself will have access to the data. In May 97, all data will be destroyed at the completion of the study. Parents may examine the screening instruments if they wish, though copies of the instrument may not be made. In addition, there will be a cake and ice cream social for the children after the testing is completed.

This sudy is being conducted by myself, Mike Williams. I am a graduate student in psychology at Utah State University. Currently, I am working on a doctoral dissertation for partial completion of a doctorate of philosophy degree. If you have any questions about this acitivity, please feel free to contact me at (801) 755-0903, or Dr. Ken Merrell, (my advisor) at (801) 797-3408.

I would appreciate your returning this consent form as soon as possible. Please sign and return this form through your student, in person, or through Mr. Terry Romero, the home/school liasion. Thank you for your support of this very important research project.

Sincerely,

Mike Williams, M.A.

Kenneth Merrell, PhD

1

Check On	e		
	I do give my permission for my child,	(name of student)	, to participate.
<u> </u>	I do not give my permission for my child,	(name of student)	_, to participate.
			_

Signature of parent or guardian

Date

2

Appendix B: Instruments Used in This Study

# **NOTE TO USERS**

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation in the author's university library.

59-68

# UMI

Appendix C: Source Tables for Analyses of Variances

# Table C-1

		Sum of	Mean	<u>F</u>	E
Source	<u>df</u>	squares	squares	ratio	prob.
ISSC Factor 1					
(negative affect/					
general distress)					
Between groups	1	529,2000	529.2000	1.6740	.1983
Within groups	118	37303.1667	316.1285		
Total	119	37832.3667			
ISSC Factor 2					
(positive affect)					
Between groups	1	273.0083	273.0083	3.3725	.0688
Within groups	118	9552.3167	80.9518		
Total	119	9825.3250			
ISSC Total					
Between groups	1	36.3000	36.3000	.0805	.7772
Within groups	118	53240.0667	451.1870		
Total	119	53276.3667			
		232,0.3007			

# Study Sample Versus Matched Comprehensive Groups

# Table C-2

Teacher Nominated Lakota Sioux Students Versus Noninternalizing Lakota Sioux

# Students

Source	dſ	Sum of squares	Mean squares	<u>E</u> ratio	<u>F</u> prob.
ISSC Factor 1					
(negative affect/					
general distress)					
Between groups	1	.9396	.9396	.0024	.9610
Within groups	58	22642.0438	390.3801		
Total	59	22642.9833			
ISSC Factor 2 (positive affect) Between groups Within groups Total	1 58 59	31.4780 4171.1053 4202.5833	31.4780 71.9156	.4377	.5109
ISSC Total					
Between groups	1	33.9352	33.9352	.0701	.7922
Within groups	58	28085.3981	484.2310		
Total	59	28119.3333			

Mike Williams 504-80-5803 PO Box 1876 Logan, Utah 84322 (435) 755-0903

### **EDUCATION**

Ph.D. Combined Clinical/Counseling/School Psychology Utah State University, Logan, UT: Expected 1998.

> DISSERTATION TITLE: An investigation of internalizing socialemotional characteristics in a sample of Lakota Sioux children.

- M.A. Educational Psychology and Counseling with emphasis in Student Services, University of South Dakota, Vermillion, SD: 1991.
- B.S. Biology (Lab Emphasis) Black Hills State College, Spearfish, SD: 1986.

### PROFESSIONAL EXPERIENCE

- 06/96-Present Bureau of Indian Affairs Special Education Monitor. Research Park, Logan, Utah. Half-time position (20 hr/wk). Responsibilities include determining special education compliance with federal standards in Bureau of Indian Affairs. schools. Conduct interviews with students, teachers, and parents. Supervisor: Margaret Lubke, PhD.
- 01/93-Present Co-therapist for Sexual Abuse Survivors Group. This group focuses on issues relating to the recovery from sexual trauma. Supervisor: Carolyn Barcus, EdD.
- 10/95-Present Utah Critical Incident Stress Debriefing (CISD) Team-Member. Facilitate post-critical incident debriefings for emergency service personnel including police, firefighters, emergency medical technicians, and emergency room medical staff.

#### PROFESSIONAL EXPERIENCE (continued)

- 10/95-06/96 Graduate Assistant. Utah State University Counseling Center, Logan, Utah. Half-time position (20 hr/wk). Responsibilities included providing individual and marital therapy for college students presenting with a diverse range of emotional and behavioral issues. Completed intake interviews and reports. Supervision of peer counselors. Supervisor: David Bush, PhD, Licensed Psychologist; Mary Doty, PhD, Licensed Psychologist; Janis Neece, PhD, Licensed Psychologist.
- 10/95-0696 School Psychology Practicum. Cache Testing Center, Logan, Utah. Conducted assessment evaluations on children for eligibility in Special Education. Completed behavioral observations and intake interviews. Assisted in parent education of rights and responsibilities. Supervisor: Yvette Casto, MS.
- 10/93-09/95 Graduate Assistant. American Indian Support Project, Psychology Department. Utah State University, Logan, UT. Half-time position (20 hr/wk). Assisted in the recruitment, selection, and retention of Native American students into Graduate Programs in Psychology at Utah State University. Provide tutoring and support for Native American students. Assist in the planning and coordination of the Annual American Psychologists and Psychology Graduate Students Conference. Supervisor: Carolyn Barcus, EdD.
- 06/95-09/95 Inpatient Practicum. Behavioral Health Unit, Logan Regional Hospital, Logan, UT. Participated on a multidisciplinary team in an inpatient facility. Co-lead group therapy. Completed psychological assessments and dictated psychological reports.
- 10/94-06/95 Counseling Psychology Practicum. Utah State University Counseling Center, Logan, UT. Provided individual and group therapy for college students presenting with a diverse range of emotional and behavioral issues. Conducted intake evaluations, interviews, and reports. Conducted case presentations. Supervisor: David Bush, PhD, Licensed Psychologist and Mary Doty, PhD, Licensed Psychologist.
- 10/93-06/94 Clinical Psychology Practicum. Utah State University Community Clinic. Provided individual and marital therapy for individuals presenting with a diverse range of emotional and behavioral issues. Conducted intake evaluations, interviews, and reports. Conducted case presentations. Supervisor: Scott Blickenstaff, PhD, Licensed Psychologist.

### PROFESSIONAL EXPERIENCE (continued)

- 01/93-06/93 Psychology Practicum. Utah State University Community Clinic. Provided individual therapy for individuals presenting with a wide range of emotional and behavioral issues. Conducted intake evaluations, interviews, and reports. Conducted case presentations. Supervisor: Sue Crowley, PhD, Licensed Psychologist.
- 09/91-06/92 Student Services Counselor. Dull Knife Memorial College, Lame Deer. MT. Provide individual therapy for students presenting with adjustment, relationship, and career issues.
- 09/91-01/92 Financial Aid Director (part-time), Dull Knife Memorial College, Lame Deer, MT. Provide financial counseling. Coordinate the Pell-Grant program for eligible students.

### TEACHING EXPERIENCE

- Fall 1991 General Biology, Dull Knife Memorial College, Lame Deer, MT. Prepare lectures and weekly lab exercises. Design and grade tests.
- Winter 1992 Study Skills, Dull Knife Memorial College, Lame Deer, MT. Prepare lectures and assignments. Design and grade tests.

### PROFESSIONAL PRESENTATIONS

- Williams, M. (April, 1996). <u>Assessment of depression and anxiety in minority</u> <u>children.</u> Poster presented at the annual meeting of the Rocky Mountain . Psychological Association, Park City, Utah.
- Crowley, S., & Williams, M. (April, 1995) <u>Effects of the IHDP on CBCL subscale</u> scores: A comparison of interventions and follow-up groups. Poster presented at the Fifth Florida Conference on Child Health Psychology, Gainesville, Florida.

### MILITARY EXPERIENCE

- 10/92-06/94 United States Army Reserve, 328th General Hospital, Salt Lake City, UT. Honorable Discharge.
- 01/87-12/88 United States Army, 540th General Dispensary, Volgelweh Germany. Honorable Discharge

# PROFESSIONAL CONFERENCES ATTENDED

06/92-06/96	Annual Convention of American Indian Psychologists and Psychology Graduate Students. (5th through 9th Conventions) 80 hours.
04/96	Second Annual Utah State University Counseling Center Conference. Dr Robert Weber. Dynamics of group therapy. 8 hours.
5/96	First Annual Utah State University Counseling Center Conference. Dr. Joseph Zinker. In search of good form. 8 hours.

### PROFESSIONAL AFFILIATION

1995-Present Student member, Society of Indian Psychologists.

### TRIBAL AFFILIATION

Oglala Lakota Sioux. Enrollment number - U32557 Citizen of the United States of America.

### REFERENCES

Kenneth Merrell, Ph.D., Associate Professor Director of Training, Department of Psychology UMC 2810 Utah State University Logan, UT 84322-2810 (435) 797-1460

Carolyn Barcus, Ed.D., Assistant Professor Director, American Indian Support Project Psychology Department UMC 2810 Utah State University Logan, UT 84322-2810 (435) 797-1460

Dave Bush, Ph.D., Staff Psychologist, Utah State University Counseling Center UMC 0115 Utah State University Logan, UT 84322-0115 (435) 797-1012

