

TEACHER, PARENT, AND YOUTH REPORT OF PROBLEM BEHAVIORS AMONG RURAL AMERICAN INDIAN AND CAUCASIAN ADOLESCENTS

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Abstract: Previous research on the mental health status of American Indian youth has documented rates of pathology that are higher than the rates for Caucasian youth. However, much of this previous research has compared rural American Indians to urban Caucasians. The present study is a comparison of American Indian and Caucasian youth living on or near a rural reservation. Results suggest that although American Indian youth have higher levels than Caucasian youth of certain problem behaviors, group differences are much less general and pronounced than previous research has documented. Analyses also revealed teachers' perceptions of youth were in some cases quite different than parents' perceptions of youth and youth's perceptions of themselves.

According to the most recent census, there are over two million American Indian people living in the United States (U.S. Bureau of the Census, 1996). Of these, estimates are that 22% reside on tribal reservations and trust lands, and that between ten and forty percent more live in towns and cities very close to reservations (Beals, Keane, & Manson, in press; Norton & Manson, 1996). There are over five-hundred American Indian tribes and Alaska Native villages, many of which are federally recognized and others which are seeking re-recognition as sovereign nations (U.S. Department of Commerce Census Bureau, 1993). Although there exists a broad diversity of cultural organization among the tribes, American Indian peoples share significant cultural values and some important demographic trends and health concerns. One of the more notable demographic characteristics of the American Indian population is its relative youth: 39% of the American Indian population is under age 20, in contrast with 29% among the United States

population as a whole (U.S. Indian Health Service, 1990). Despite positive health trends, such as a decline in the use of many drugs since the early 1980s (Beauvais, 1992), significant health risks persist for these young people.

One source of risk involves the dramatic changes that have occurred among many American Indian tribes throughout the twentieth century. Some tribes' populations have increased significantly while other tribes have virtually disappeared. Many tribes have had to leave the lands of their ancestors as a result of forced relocation policies and in search of economic opportunity, as others continue to live on family lands but have left behind ways of life that had been practiced for generations. Centuries' old language bases, child-rearing practices, life roles, and family structures have been disrupted to such an extent that many tribes struggle to maintain awareness of the traditions and practices which defined their ancestors (Berlin, 1987). Urban and rural American Indian communities alike have faced considerable challenges to their collective and individual well-being.

Until recently, the emotional and socio-cultural toll of developmental pressures on American Indian youth received little concern from those outside of the American Indian communities except by a handful of clinicians, anthropologists, and religious leaders. In the last quarter century, however, as concerns have risen regarding the health of America's ethnic populations, many tribes have sought to develop stronger voices. Also, during this time American Indian youth have come under investigation by social science researchers who have documented high rates of depression, suicidality, substance abuse, and emotional dysfunction in this population (Blum, Harmon, Harris, Bergeisen, & Resnick, 1992; U.S. Office of Technology Assessment, 1990). National rates of suicide, accidental death rates, and homicide have been observed to be two to three times as high for American Indian youth and young adults, compared to American youth as a whole (U.S. Office of Technology Assessment, 1990; U.S. Indian Health Service, 1990).

Even less well noted than the worrisome health and behavior statistics have been the counterbalancing signs of positive trends and features of American Indian communities, in which, despite considerable risks, many children grow into adolescence with secure and strong identities and family and community affiliations. Indeed, the early school-age years have been noted to be successful ones for most American Indian children. As far back as the late 1960s there was recognition that American Indian and Caucasian youth perform at comparable levels in school through much of the elementary school years (Saslow & Harrover, 1968). More recently, Beiser and Attneave (1982) observed that American Indian children as a group appear to function as well as their non-Indian counterparts until early adolescence.

Yates (1987) posited that the rise in problems for American Indian youth as they become adolescents may be related to their growing sense of

alienation and awkwardness in fitting into social systems and schools that are not good matches for their styles of conceptual and language processing. Yates also observed that traditional American Indian values, such as sharing, allegiance, respect for elders, noninterference, and present-orientation, are not accorded the same importance in European American society and that this contributes to American Indian youths' sense of conflict, pessimism, and alienation. These concerns have been echoed by Sanders (1987), who described a "cultural value conflict" that American Indian youth face in Anglo-American classrooms. Especially when American Indian children are schooled in environments where there are few, if any American Indian teachers, schools may be experienced by the youth as micro-cultures with few role models or culturally-synchronous developmental pathways. These arguments suggest that the academic struggles of American Indian youth may be a direct result of being poorly understood with respect to their values, learning strategies, and perceptual styles (Greenbaum, 1985).

The present study examines problem behavior among American Indian and Caucasian high-school students living in a rural reservation community. There has been previous research on this topic: A number of studies have compared American Indian and Caucasian youth on such variables as health, psychosocial adjustment and risk, mental health services utilization, and academic performance variables (Beiser & Attneave, 1982; Halpin, Halpin, & Whiddon, 1985; Rotenberg & Cranwell, 1989; Wright, Mercer, Mullin, Thurston, & Harned, 1994). Across this range of variables, American Indian youth typically show higher rates of problem behavior and fewer positive outcomes. A recent study of rates of severe emotional dysfunction (SED) among youth in the state where the reservation is located found the rate of SED among American Indian youth to be more than double the rate for Caucasian youth (16.7% vs. 6.9%) (NIMH, 1990).

While this research is important in providing information about the status of American Indian youth, and certainly should be cause for concern, it also is somewhat limited in its generalizability. In particular, there are several issues that this research does not address. First, comparisons of the two ethnic groups typically compare Caucasian youth living in urban and suburban settings with American Indian youth living in reservation communities. Given the extent to which the experiences of rural and urban youth may differ, this comparison may tell us less about ethnic differences than about geographic differences. It was a goal of the present study to examine youth of both ethnicities living in a *geographically contiguous area*, on or near a rural reservation.

Another issue that has not been adequately addressed in previous research is the extent to which reports about problem behavior may vary depending on the source of the information. Differences across ethnic groups may vary depending on whom is the informant. Given the differences between American Indian culture and Anglo-American educational philosophy, for instance, it may well be the case that American Indian youth and their

parents have different perceptions than teachers. If this is true and if systematic patterns of divergence can be discerned, it would have important implications for prevention and intervention. For instance, the classic studies on self-fulfilling prophecy (Rosenthal & Jacobsen, 1968; Rist, 1970) suggest that a teacher's expectations have the potential to influence students' behavior and perceptions of self. This is a topic that has been extensively researched and within which there is some controversy about the strength and directionality of relations among variables, as well as the possibility for some confounding variables (Brophy, 1983; Cornblum, Annis, & Tanaka, 1997). At the very least, however, it seems important to investigate whether there are discrepancies in teachers' versus others' perceptions of these two ethnic groups. The research described here included as informant: youth, their parents, and their teachers.

Finally, a third goal of this research was to examine differential patterns of behavior for males and females. There is a great deal of evidence to suggest that beginning in adolescence and possibly earlier, males have higher rates of externalizing and females have higher rates of internalizing pathology (e.g., Gjerde, Block, & Block, 1988; Green, Clopton, & Pope, 1996; Ledbetter, Blatt, & Quinlan, 1985; Lewinsohn, Rhode, & Seeley, 1993). However, the extent to which ethnic group differences in levels of problem behavior may vary by gender is not well understood. To summarize, the variety of informants, the geographic proximity of the two ethnic groups, and examination of gender differences were ways in which this study had potential to provide new information about rural American Indian and Caucasian adolescents.

Method

Subjects

Subjects were 404 children and adolescents in 7th- 9th- and 11th-grades. The sample originally contained a small number of subjects who were neither Caucasian nor American Indian. These were eliminated from the present study because their numbers were insufficient to include in group comparisons. Of the 112 American Indian youth in the study, 52 were male and 60 were female. A total of 54 were in 7th-grade, 31 were in 9th-grade, and 26 were in 11th-grade at the time of data collection. Of the 292 Caucasian youth in the study, 130 were male and 162 were female. A total of 105 were in 7th-grade, 100 were in 9th-grade, and 87 were in 11th-grade at the time of data collection. The higher proportion of American Indian youth in 7th-grade was not significant using a Chi-square test. Other demographic characteristics of the sample are included in Table 1. As is apparent from Table 1, the two ethnic groups did not differ in terms of age.

Table 1
Demographic Characteristics of American Indian and Caucasian
Adolescents in the Sample

Variable	Race	
	American Indian (n=112)	White (n=292)
Age in years	14.82	14.78
Percent of children living in single parent family	34.8	18.5
Percent of children living with both biological parents	34.8	66.1
Percent of children living in blended family or other family situation (i.e., extended family)	30.4	15.4
Percent of children reporting that someone in their family attempted/ completed suicide	41.7	10.7
Percent of children reporting that a friend had committed suicide	21.2	4.2
Percent of children reporting a grade point average (GPA) of B or above (does not include students with B-)	56.1	84.4
Percent of children reporting a GPA of C or less (does not include students with C+)	21.6	4.9

However, across a variety of measures of family structure, negative life events, and academic performance the American Indian group appeared to be at higher risk. The implications of these differences are considered in the discussion section of this paper; however, it is also important to acknowledge that within this sample there were many positives reported by American Indian youth, including a high rate of adherence to traditional values and practice of traditional cultural and religious activities.

Measures

The three versions of the behavior checklist developed by Achenbach and colleagues were utilized as measures of problem behavior. These measures include the Child Behavior Checklist (CBCL) for parent report (Achenbach, 1991a), the Teacher Report Form (TRF) for teacher report (Achenbach, 1991b), and the Youth Self Report (YSR) (Achenbach, 1991c).

All three of the measures contain identical scales, including the aggregate problem behavior scales of Internalizing and Externalizing, and eight clinical subscales including Withdrawal, Somatic Complaints, Anxiety/Depression, Social Problems, Thought Problems, Attention Problems, Delinquency, and Aggression. Raw scores are converted to t-scores for each of the scales based on population norms.

The Achenbach measures have been utilized extensively in research on children and families to assess a range of psychopathological behaviors in youth and adolescence. Their psychometric properties have been studied extensively, and Achenbach (1991a) states that the work done to date suggests that development of separate norms for subgroups within the U.S. population may not be necessary because of a lack of statistical differences. Less is known, however, about the appropriateness of the measure specifically for American Indian youth. This is an issue of considerable importance. In order to develop a clear understanding of the differences between American Indian and Caucasian adolescents, there is a need to use measures that are valid and reliable across both groups. These issues are addressed further in the discussion section.

Data Collection Procedures

Approvals were obtained from Indian Health Service's Human Subjects Review Board, a large public university's institutional review board, and the Tribes' Business Council. Once these approvals were in place, presentations were made to the school boards of the various districts to be included in the study. Some required one presentation while others required repeat visits. All requested school districts ultimately gave their consent.

All nine-hundred 7th- 9th- and 11th-grade students in seven schools from four school districts on or near the reservation were asked to give assent and to participate in the study. One parent and one teacher of each student were also asked to consent and to participate. Student participants completed the Youth Self Report (YSR) and several additional questionnaires. Data were collected during the 1992-1993 academic year using a group administration format. Parents completed the Child Behavior Checklist (CBCL) regarding their child. Parents were mailed the CBCL along with a self-addressed stamped envelope. Teachers completed the Teacher Report Form (TRF) regarding the student. TRFs were dropped off and picked up from teachers. Teachers were paid three dollars per completed TRF. Labels were used so that once instruments were received from student, parent, and teacher the label was separated thereby maintaining anonymity.

Active consent/assent was required before a student could be included in the study. The student had to give assent and his/her parent had

to give consent before the student could be included. If either the parent or the student refused neither one was included in the study. With the approval of their school boards, teachers gave consent for their own participation.

Consent/assent forms were distributed at school and then by mail. If at any point the student or parent declined to participate they were never contacted again. In some instances signed forms did not result in completed instruments. Some students who had assented missed the administration day and were followed up at school. Many parents who had given consent did not return the CBCL. When this occurred, up to three additional contacts were made by phone or mail. When no instruments were completed following the third such contact, no further contacts were initiated.

Analysis Plan

Caucasian and American Indian youth were compared on measures of behavior as assessed by the Achenbach (1991a; 1991b; 1991c) instruments (CBCL, TRF, YSR). Rather than comparing individual data points, overall profiles on these measures were compared using a multivariate analysis of variance procedure (MANOVA). The sample was split by gender, and separate MANOVAs were run for data from the CBCL, TRF, and YSR. There were, therefore, a total of six sources of data: comparison of Caucasian versus American Indian males on teacher report, parent report, and self-report of behavior, and comparison of Caucasian versus American Indian females on teacher, parent, and self-report of behavior. It is important to note that it would have been possible to utilize a factorial design and run analyses on the entire sample, including gender as a second independent variable. The primary advantage of doing so is that it would be possible to examine gender effects first, and if none are found, to collapse the sample across gender and simply examine ethnic group differences. However, one of the goals of this research was to examine how profile differences between the ethnic groups vary across gender. Some of these differences may be fairly subtle and related to general trends and patterns of elevated scores that might not be detectable through multivariate statistical comparisons across gender. Given the exploratory nature of this research, it therefore seemed important to employ an analysis plan in which the data from the different genders were examined separately.

Two profiles were considered for each data source. First, scores across the eight clinical scales (e.g., withdrawal, aggression, delinquency, etc.) were considered as a group. Then scores on the global internalizing and externalizing scales were considered together. This resulted in a total of 12 MANOVA equations.

Role of Community

In order to overcome some of the common problems with research projects in American Indian communities, the research team utilized “community empowerment” strategies (Ball, Ball, & Fisher, 1996; Fisher, Storck, & Bacon, 1997). At the center of these strategies is the understanding that community members must be engaged as active members of the research team. They must help shape the research questions, provide input into questionnaire design and implementation of interventions, and ultimately are partners in the interpretation of the results. The primary purpose of research based on this community empowerment model is to provide information that will be useful to the tribal community. Disseminating the results to the scientific community is considered of secondary importance.

In the present study, a group of tribal elders were recruited to participate in the development of hypotheses, the selection of variables to study, the interpretation of results, and the discussion of the implications of the results. The research team, therefore, included both the professional “academic” staff and the tribal “cultural consultants.” The research team met on approximately a monthly basis for over a year to discuss issues related to the study. These meetings were fairly informal, and generally involved issues being presented by either the academic staff or the cultural consultants for discussion. There were many occasions upon which a much broader understanding of issues emerged as a result of these discussions. Such areas are highlighted in the discussion section of this paper. This group continues to meet to lay out plans for implementing changes within the school system based on the results of this study.

One final note: The particular tribal community in which this project was conducted had established a “research code” that provided clear guidelines about ownership of the data and other relevant topics. Use of similar codes in other minority communities has great potential to facilitate research conducted from a community empowerment perspective.

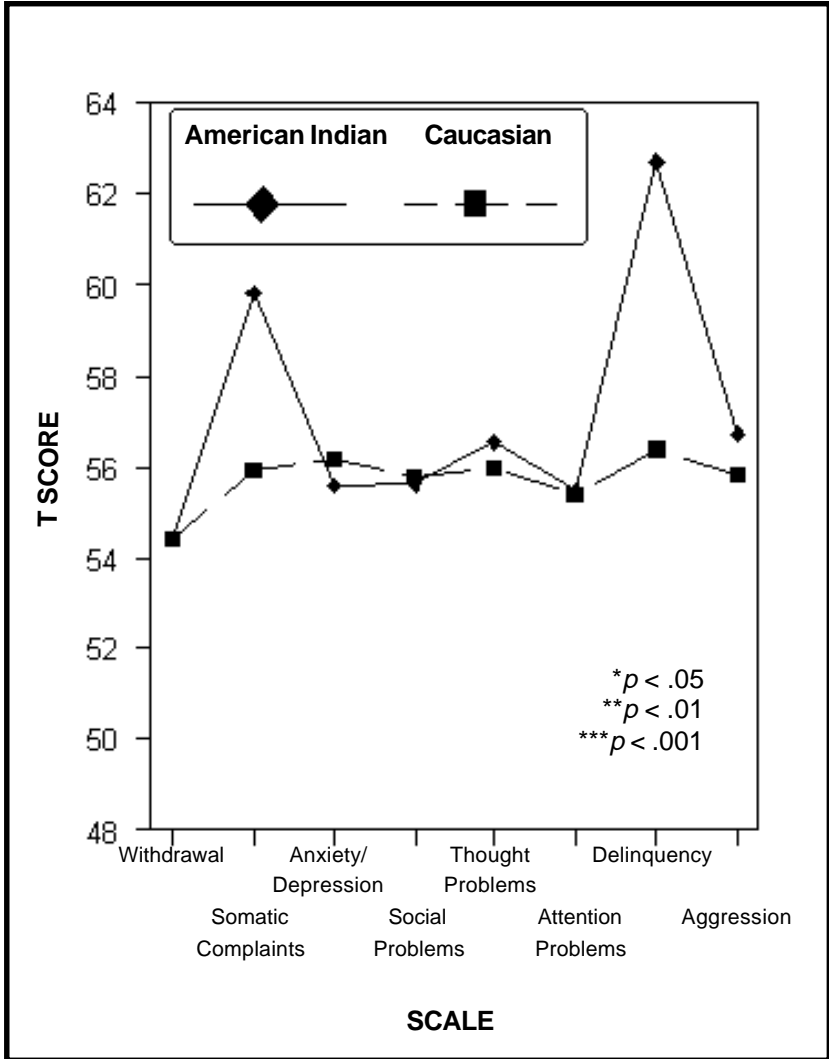
Results

Profile differences are displayed in Figures 1 through 8. We first present the results of MANOVAs comparing the profiles on American Indian and Caucasian males.

Comparison of Profiles for American Indian and Caucasian Males

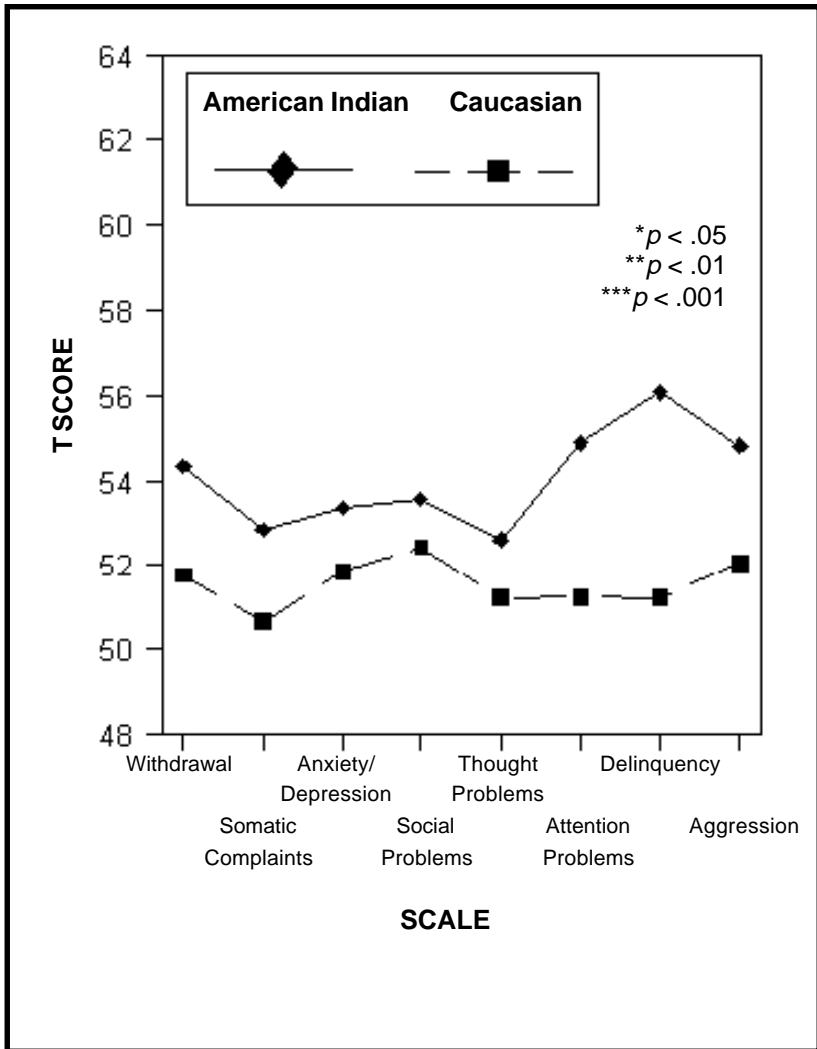
Profile comparisons for males are presented in order of youth self-report data (Figure 1), teacher data (Figure 2), and parent data (Figure 3). Clinical scale profiles obtained by youth self-report were significantly higher for American Indian than for Caucasian males [$F(8,166) = 3.68, p < .001$]. Given the significant multivariate F statistic, it was also appropriate to examine

Figure 1
 Mean Differences on Achenbach Scales:
 American Indian vs. Caucasian Males, Self Report



- Significantly more overall problems reported by AI males than by White males**.
- Significantly higher scores on the following scales: Somatic Complaints*; Delinquency***.

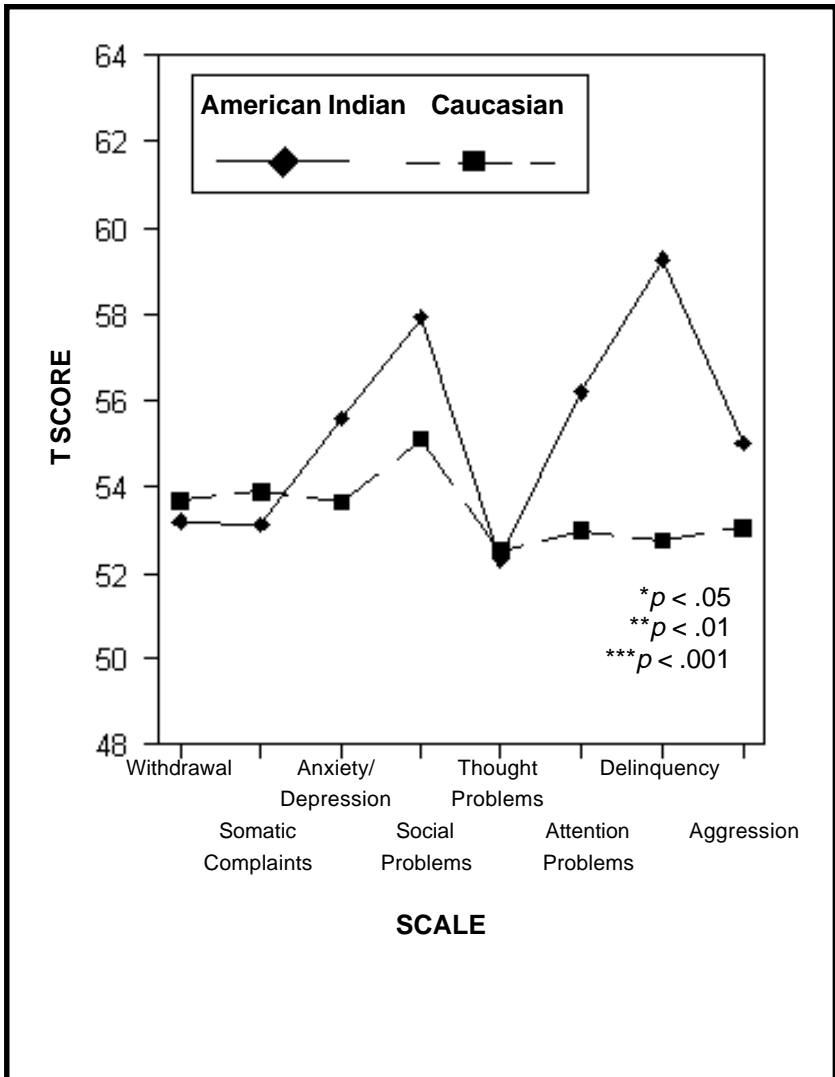
Figure 2
 Mean Differences on Achenbach Scales:
 American Indian vs. Caucasian Males, Teacher Report



- Significantly more overall problems reported by teachers for AI males than for White males***.

- Significantly higher scores on the following scales: Withdrawal***; Somatic Complaints**; Anxiety/Depression*; Attention Problems***; Delinquency***; Aggression**.

Figure 3
 Mean Differences on Achenbach Scales:
 American Indian vs. Caucasian Males, Parent Report



- Significantly more overall problems reported by parents of AI males than parents of White males***.
- Significantly higher scores on the following scale: Delinquency***.

differences on individual scales. Of the eight scales, somatization and delinquency were significantly different [$F(1,173) = 5.17, p < .05$, and $F(1,173) = 19.21, p < .001$, respectively], with scores for American Indian males higher than scores for Caucasian males.

Differences between self-reports provided by American Indian and Caucasian males approached statistical significance for the internalizing/externalizing profiles [$F(2,172) = 2.66, p = .07$]. Again, this difference was the result of higher scores for American Indian youth. An examination of the means for the individual scales reveals that it is externalizing on which of these two groups differ most notably (although again, the difference only approached statistical significance).

Profile differences for American Indian and Caucasian males based on teacher report were both more widespread in nature (i.e., across a number of clinical scales) and of greater magnitude. The multivariate test of significance was significant [$F(8,163) = 7.52, p < .0001$], with American Indian males again obtaining higher profiles. In addition, of the eight scales, six were significantly higher for American Indian males, and the remaining two approached significance. Values were as follows: withdrawal [$F(1,170) = 15.28, p < .001$]; somatization [$F(1,170) = 12.45, p < .01$]; anxiety/depression [$F(1,170) = 6.00, p < .05$]; social problems [$F(1,170) = 3.43, p < .10$]; thought problems [$F(1,170) = 2.81, p < .10$]; attention problems [$F(1,170) = 31.79, p < .001$]; delinquency [$F(1,170) = 41.03, p < .001$]; aggression [$F(1,170) = 26.94, p < .001$].

As expected, based on the clinical scale differences, profile differences on the internalizing and externalizing scales were also highly significant. Both the overall profiles [$F(2,169) = 8.51, p < .0001$] and the individual scales yielded significant differences [internalizing $F(1,170) = 10.12, p < .01$; externalizing $F(1,170) = 13.25, p < .001$]. Again, scores were higher for American Indian than for Caucasian males.

Profile differences based on parent report must be interpreted cautiously, as the participation rate for parents was approximately half that for teachers and youth. Parent report profile differences on the clinical scales were significantly higher for American Indian males [$F(8,76) = 3.96, p < .01$]. Examination of univariate comparisons across the clinical scales revealed a significant difference for delinquency only [$F(1,83) = 14.82, p < .001$]. Differences on the attention problems scale approached significance [$F(1,83) = 3.43, p = .07$]. Once again, differences in the overall profiles and on these individual scale were reflective of higher scores for American Indian males.

Finally, profile comparisons across internalizing/externalizing scales approached but were not statistically significant [$F(2,82) = 2.59, p = .08$] (Figure 4). As was the case with the youth self-report data for males, profile differences were primarily accounted for by higher levels of externalizing reported by parents of American Indian than of Caucasian males. In this case the difference on externalizing was statistically significant, although

the meaningfulness of the significance is questionable, given the lack of multivariate significance.

Comparisons of Profiles for American Indian and Caucasian Females

Examination of profile differences for females are presented in order of youth self-report data (Figure 5), teacher data (Figure 6), and parent data (Figure 7). Youth self-report profiles were significantly higher for American Indian females than for Caucasian females [Hotelling's $F(8,196) = 2.88, p < .01$]. Examination of the clinical scales revealed significantly higher scores for American Indian females on anxiety [$F(1,203) = 5.35, p < .05$], social problems [$F(1,203) = 9.12, p < .01$], thought problems [$F(1,203) = 4.29, p < .05$], and delinquency [$F(1,203) = 9.92, p < .01$]. As with self-report for boys, the profiles on internalizing/externalizing scales were not significantly different for girls.

Teacher report profiles across the clinical scales were not significantly different for American Indian and Caucasian girls. It was therefore not appropriate to consider differences on individual clinical scales. Similarly, differences between the two groups on the internalizing/externalizing profiles were not significant.

Parent report profiles were significantly higher for American Indian females than for Caucasian females across the clinical scales [Hotelling's $F(8,100) = 2.22, p < .05$]. Interestingly, none of the individual scales was significantly elevated for American Indian females, although several approached significance. Finally, there was not a significant difference between the two groups on the internalizing/externalizing profiles (Figure 8).

Discussion

The profile comparisons for American Indian and Caucasian youth revealed several important areas of distinction. First, there was a clear trend across the reports of all informants of elevated profiles for American Indian youth compared to Caucasian youth. Of the twelve profile comparisons, six were significant and three more approached significance ($p < .10$). In each of these analyses, the profiles of American Indian adolescents were higher than those of Caucasian adolescents. This finding is consistent with previous research, which has found higher rates of "problem behavior" among American Indian children and adolescents. However, the present study allows for more detailed investigation of this issue. In particular, data from males and females produced dissimilar results, and profile patterns also differed considerably by informant.

One of the most notable differences existed between the profiles that different informants provided of Caucasian and American Indian males. By their own report, and by the reports of their parents, the American Indian

Figure 4
Mean Differences on Self Report, Teacher Report, and Parent Report of Externalizing and Internalizing:

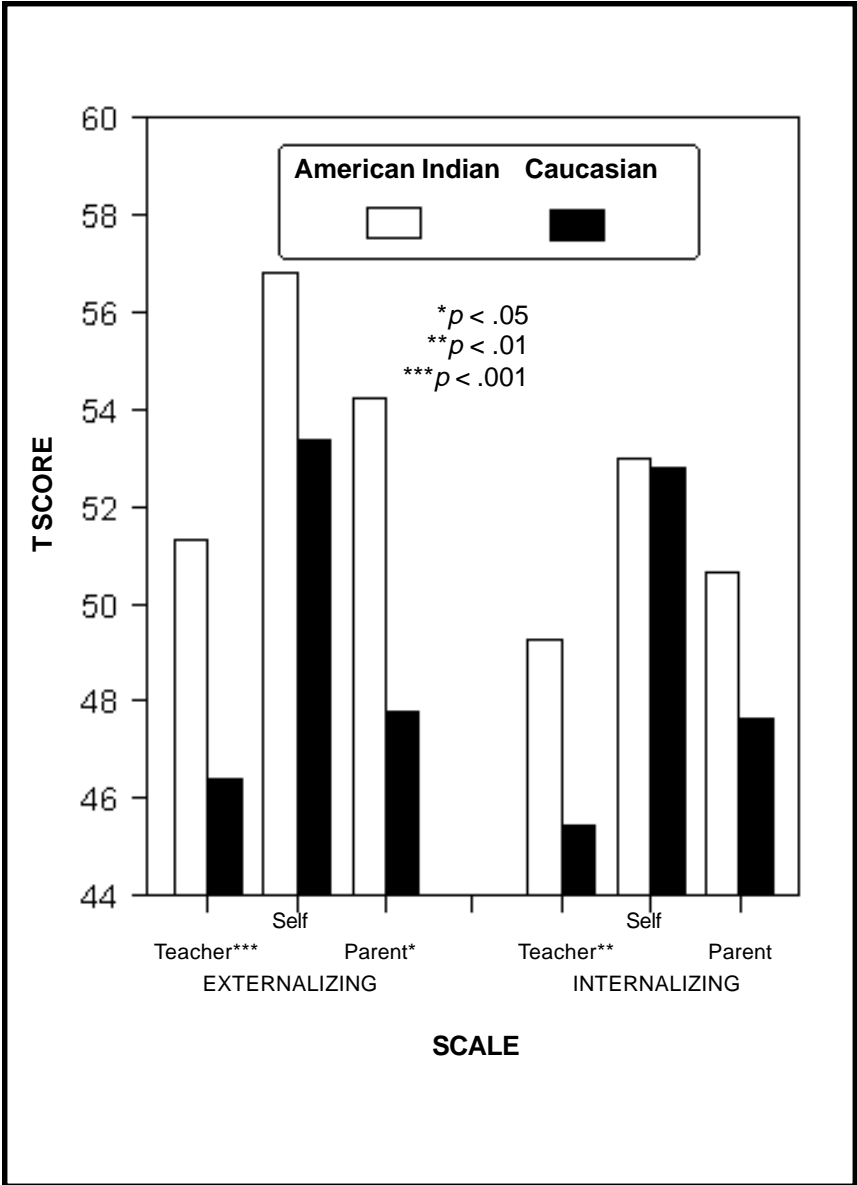
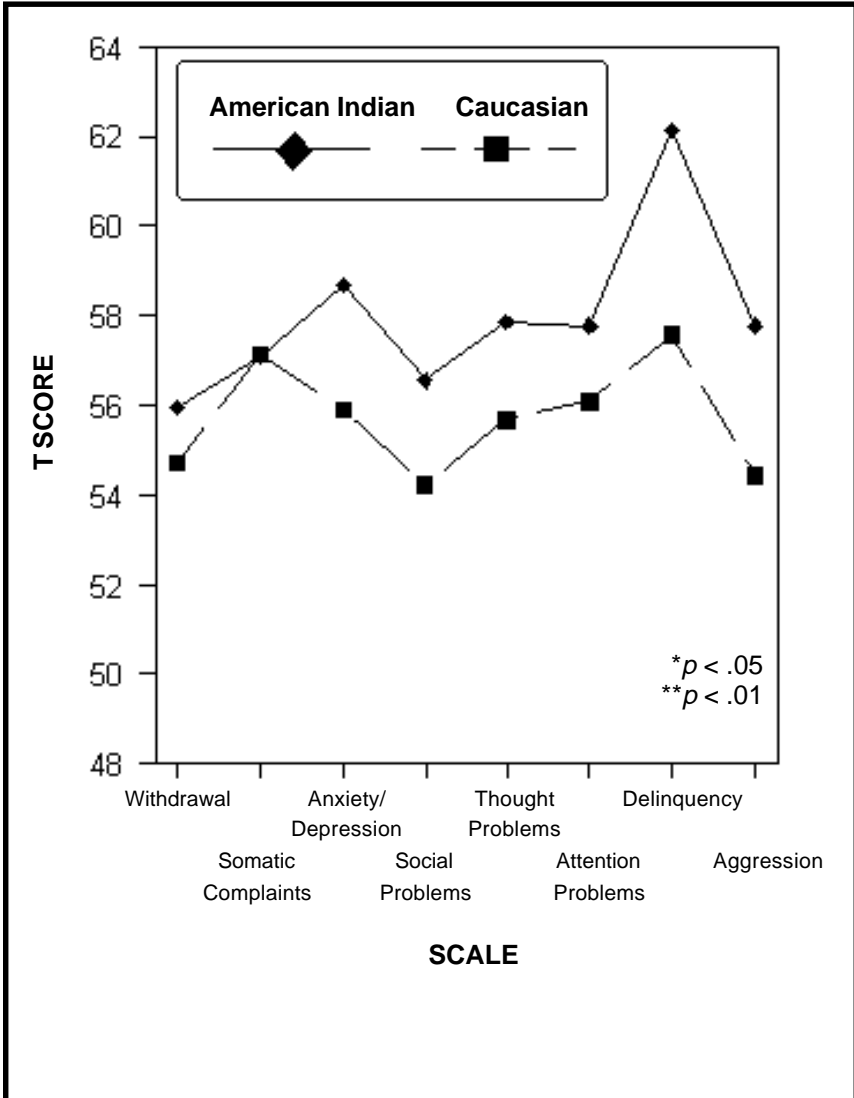
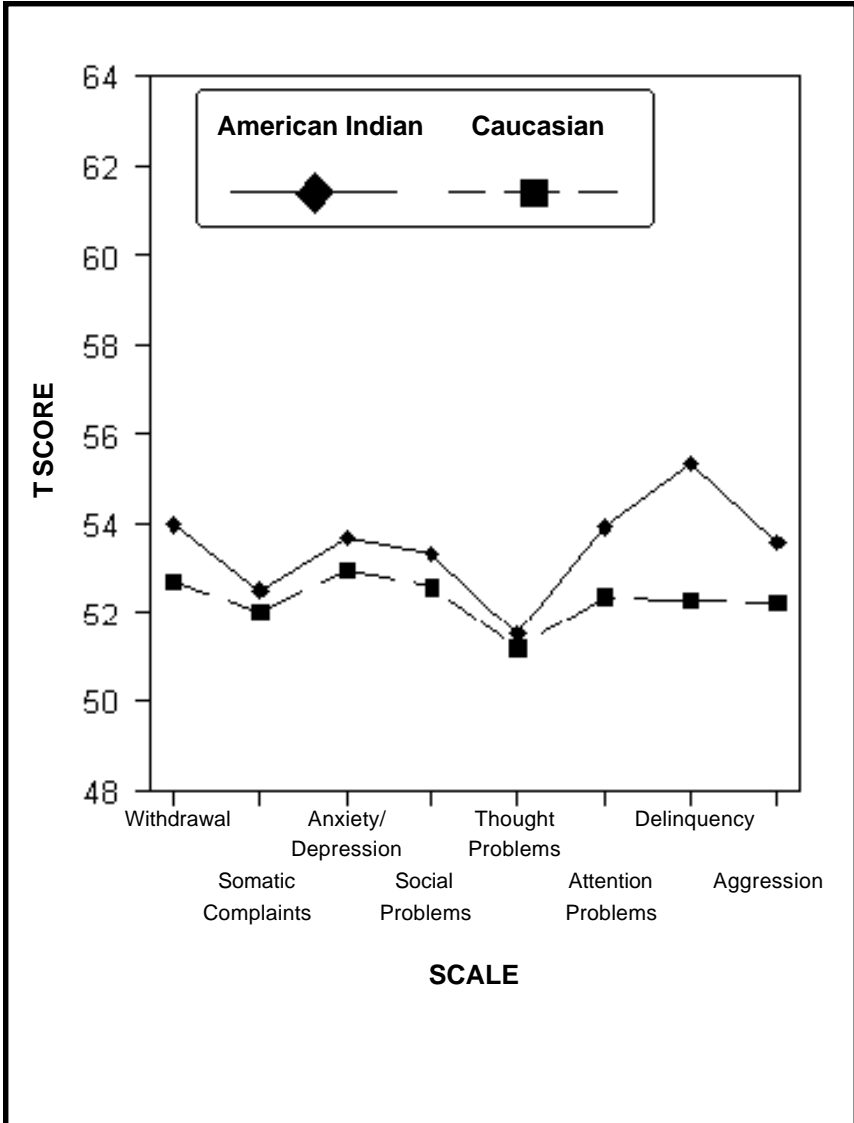


Figure 5
 Mean Differences on Achenbach Scales:
 American Indian vs. Caucasian Females, Self Report



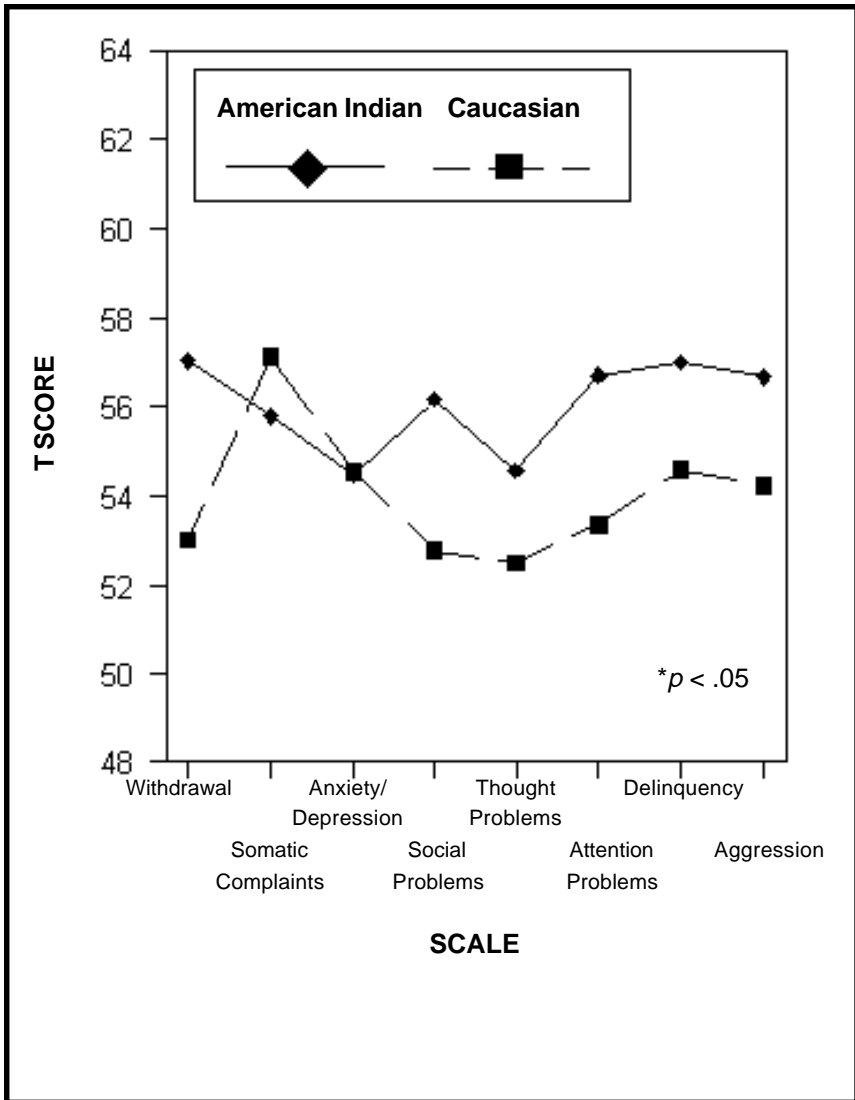
- Significantly more overall problems reported by AI females than White females**.
- Significantly higher scores on the following scales: Anxiety/Depression*; Soical Problems**; Delinquency**.

Figure 6
Mean Differences on Achenbach Scales:
American Indian vs. Caucasian Females, Teacher Report



-No significant differences in overall problems for females reported by teachers, thus differences on individual scales are not interpretable.

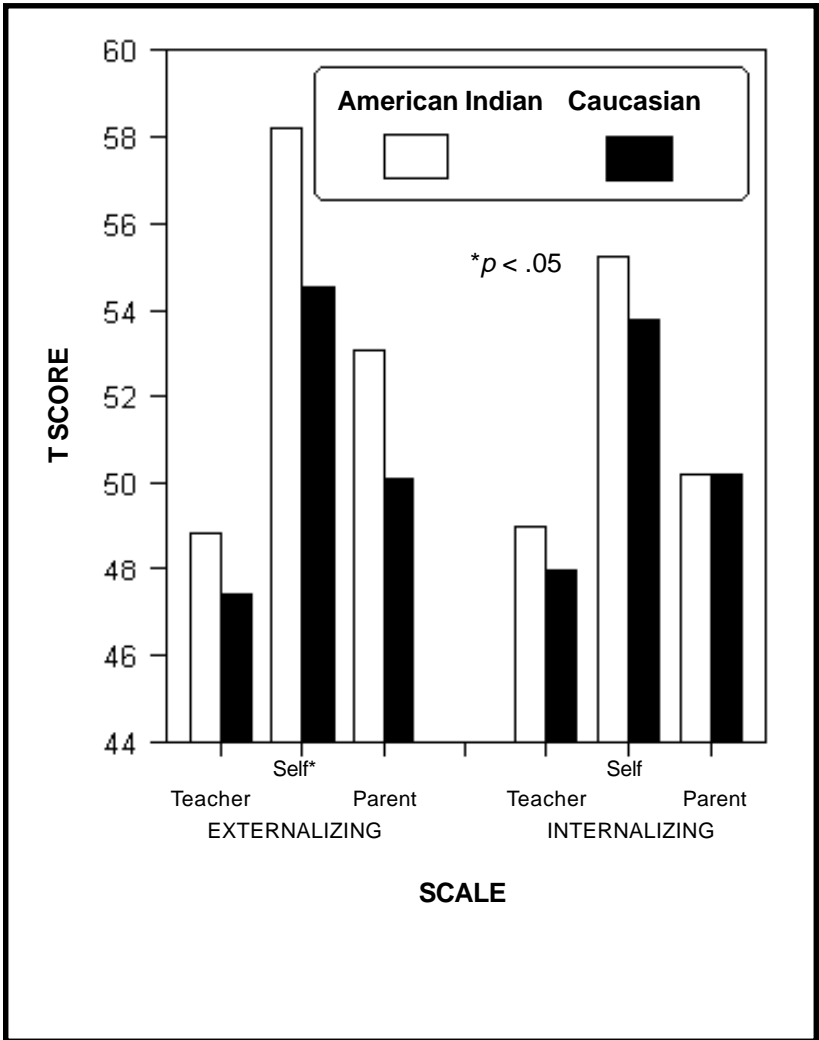
Figure 7
 Mean Differences on Achenbach Scales:
 American Indian vs. Caucasian Females, Parent Report



- Significantly more overall problems reported by parents of AI females than parents of White females*.
- No significant differences on individual scales.

males in this sample did have higher overall rates of problem behavior. However, an examination of the individual CBCL clinical scales reveals that these differences were mainly the result of significantly elevated scores for American Indians on the delinquency scale (for youth report, the somatization scale was also significantly elevated). Moreover, differences across externalizing and internalizing scales were close to, but not significant for both youth report and parent report.

Figure 8
Mean Differences on Self Report, Teacher Report, and Parent Report of Externalizing and Internalizing:
American Indian vs. Caucasian Females



In contrast to youth and parent report, the comparisons between teacher reports of problem behavior for Caucasian and American Indian males reveal a different pattern. The profiles of American Indians were again elevated, but in this case the elevation was due to a much broader elevation across the clinical scales. Six of the eight clinical scales were significantly elevated, including withdrawal, somatization, anxiety/depression, social problems, thought problems, attention problems, delinquency, and aggression. In addition, both the internalizing and externalizing scales were significantly higher for American Indian males than for Caucasian males. Moreover, of the effects obtained in the analyses, these were as a group the greatest in magnitude.

A number of interpretations may be made of these results. One is based on the assumption that teachers are accurate observers of these two groups of adolescents. If this is the case, then American Indian males are displaying higher rates of a range of problem behaviors than Caucasian males in the school. This is essentially a context specific interpretation; presumably, the reason for different profile comparisons based on youth and parent reports is that the youth and their parents are considering different contexts than school (or a broader range of contexts than school) when completing the rating forms. For this interpretation to be accurate, youth must behave differently outside of school than in school.

Another interpretation is that teachers' reports are accurate not only in the schools, but across contexts, and that parents and youth are minimizing or failing to report problem behaviors. While this is a viable possibility, it seems unlikely—especially given the increased levels of delinquency in American Indian youth and parent reports. Whether one or more of these interpretations is accepted, it is clear that teachers perceived American Indian males as more likely to have a global range of problem behaviors as compared to their Caucasian male peers, whereas American Indian parents and the youth themselves perceived higher rates of problem behavior in a narrower area of functioning that included delinquency.

The final interpretation of these results we considered is based on the concept of systematic bias. It may be the case that teachers rated the American Indian male youth according to a globally symptom-oriented conceptualization; thus, whether or not particular behaviors occur they may be more frequently endorsed as a way of designating the youth as a "generally troubled" individual.

The cultural commentators' responses to these results were illuminating. First, in response to the elevated self-report and parent report of delinquency for American Indian males, there was some question about the extent to which this should be viewed as indicative of a pathological process (to facilitate consideration of this issue, items from the delinquency scale are listed in Table 2). Within the traditional American Indian cultures represented on this particular reservation, the role of the "young warrior" for adolescent males has historically been accepted and continues to be valued.

Given the social conditions under which many of the youth live, some degree of acting out against authority in school (and in general) was seen to conform to the young warrior role, and was also viewed as an adaptive response to adverse living circumstances. Indeed, there was more concern about youth who were showing no rebelliousness than about those whose behavior was troublesome at times. This is not to say all levels of delinquency were viewed as positive by the commentators. Behavior that places youth or community in harm's way, through violent or destructive behavior, was seen as problematic, not socially acceptable, and as something that could lead to social disintegration, substance abuse, incarceration, and premature death.

The cultural commentators also viewed the teachers' more global elevated symptom ratings of the American Indian youth as cause for concern. Whether this pattern of results is due to actual higher rates of problem behavior in the school setting or whether it is due to bias on the part of the teachers, it is clear that intervention is called for. A report in the tribal newspaper (Morrison, 1992) in the years prior to the study did bring attention to the fact that the percentage of American Indian teachers in the school districts on or near the reservation was extremely low: 0-5% in all schools. Programs aimed at (a) reducing antisocial behavior, (b) recruiting and hiring more American Indian teachers, and (c) increasing existing teacher's levels of cultural sensitivity could help to decrease the discrepancy between the problem behavior profiles of Caucasian and American Indian adolescent males. Indeed, such a program is in the planning stages.

Table 2
Delinquency Items from the Child Behavior Checklist
(Achenbach, 1991a)

Item
Doesn't seem to feel guilty after misbehaving
Hangs around with children who get in trouble
Lying or cheating
Prefers playing with older children
Runs away from home
Sets fires
Steals at home
Steals outside the home
Swearing or obscene language
Thinks about sex too much
Truancy, skips school
Uses alcohol or drugs
Vandalism

In contrast to the profiles for males, Caucasian and American Indian females showed a different pattern of results. In this case it was teachers who saw no differences between the two groups, and parents and youth who saw the American Indians as having higher rates of problem behavior. Specifically, by their own reports, American Indian females had higher overall profiles than Caucasian females and higher levels of anxiety, social problems, thought problems, and delinquency. Parent reports revealed higher overall profiles for American Indian females; however, none of the clinical scales were significantly different. Teacher reports did not produce significantly different profiles. Interestingly—and a reflection of the overall similarity of girls' profiles—there were not significant differences between American Indian and Caucasian girls on the externalizing/internalizing profiles for any of the three informant groups. Moreover, in general, the effect sizes for the comparisons of females were, in general, lower than those for the males.

The lack of agreement between teachers and the two other informants (youth and parents) on the clinical scale profiles again may be interpreted in a number of ways. First, it must be taken into consideration that the magnitude of the two ethnic groups' profile differences was less for the females than for the males. Thus, while a search for meaning of these results is important, it appears that all three informants have more similar impressions of the girls than of the boys. This being so, it still may be the case that teachers perceive Caucasian and American Indian females' behavior as more similar than either parents or the youth themselves because in contrast to the boys, their behavior in school may actually be more similar. This is consistent with the notion that the most salient behaviors to teachers are disruptive behaviors such as talking out of turn, fighting, and refusal to follow instructions.

According to the cultural commentators, American Indian girls would be unlikely to display disruptive behavior in a school setting, as it would be a violation of cultural norms. If emotionally troubled, they would more typically display internalizing behaviors, such as social withdrawal, non-participation in activities, and sadness. Moreover, girls in general display lower rates of disruptive behavior than boys. Thus, it may be that teachers draw less of a race distinction than a gender distinction when it comes to their perceptions of girls.

As indicated in Table 1, these results are also consistent with the stressful life events—problem behavior relations. American Indian girls appear to be exposed to a high degree of risk factors, and would be expected to exhibit symptoms as a result of this exposure. To a certain extent, the fact that this symptomatology is not apparent to teachers is cause for some concern; just as the boys being identified as globally symptomatic by the teachers may lead to a lack of investment in teaching them, the girls being identified as globally asymptomatic may cause existing problems to be overlooked.

Implications for Future Community Interventions

The implications of these results for the design of future preventive interventions are quite important. We begin with the notion that for many American Indian children and adolescents, the school environment is at odds with a variety of cultural values. In particular, the emphasis on individual achievement, the focus on linear thinking, and a number of differences in styles of social interaction may be quite foreign to many youth. This may lead to an increase in alienation, as well as oppositional and generally negativistic behavior on the part of the boys, and a general tendency to conform on the part of the girls even in the face of self- and parent-reported higher rates of symptoms. However, in neither case do teachers appear to share the perceptions of the youth about their adjustment in school. The potential may be great, therefore, for misattributions of youth behaviors on the part of the teachers.

In order to address these issues, a two-stage intervention might be employed. In the first stage, teachers could be educated regarding the American Indian youths' own reports of symptoms and the manner in which these symptoms are (a) related to exposure to actual risk factors and (b) expressed or not expressed in the academic environment. This could be accomplished through a series of in-service training workshops. In the second stage, there could be a focus on developing anti-bias curricula that allow students of different ethnic groups to benefit equally from the educational resources being offered. In particular, encouragement of specific skills typical of American Indian culture such as collective participation and non-linear thinking could be mutually beneficial for Caucasian and American Indian students, and would increase the likelihood that the American Indian student feel more welcome in the classroom. This curriculum could include content related to cultural heritage, but would go beyond content to also include process components. The anticipated effects of this combined intervention would be to increase teachers' sensitivity to the psychological functioning of American Indian youth and to create an academic environment for American Indian youth that is supportive and empowering. An intervention of the type described here is currently being designed and we anticipate implementing a pilot study of its efficacy in the near future.

Cautions and Other Considerations

One issue of critical importance in this research is that although this paper has addressed topics such as teacher bias and lack of parent involvement we in no way mean to imply that either teachers or parents are at fault or are consciously perpetuating a problem situation regarding youth. Teachers in the reservation community are there by choice and may be assumed, at least, to be genuinely committed to the success of youth. It

may be that teachers have developed general impressions of the two ethnic groups, and are more passively biased by the information available to them and by general stereotypes within European-American culture than they are actively biased for or against either of the ethnic groups. If teachers do feel “threatened” by or otherwise uncomfortable in the face of male American Indian adolescents’ acting out behavior, and consequently make global attributions about the pathology of this behavior, it is likely that they lack both knowledge to understand the behavior in a non-threatening manner, and the tools to intervene effectively in order to redirect such behavior into more constructive actions.

Similarly, parents’ lack of involvement or support in the school setting is certainly understandable given the historical perspective presented briefly above, but must be addressed if interventions are to be effective. The phenomena described in this paper can be largely accounted for by relatively basic processes that social psychologists and others have known about for some time, and that relate to the power of the situation to determine attitudes and behavior. As interventionists, we encourage a focus on changing the situation in order to alleviate these problems.

Several additional cautions are necessary in interpreting the results. First, this study does not examine the psychometric properties of the scales used to evaluate problem behavior. These analyses were not undertaken in part because the relatively small sample size makes difficult an examination of the extent to which the conceptual framework of the scales is appropriate for American Indian youth. However, one consequence of this is that certain of the results—in particular the lack of differences in reports of certain informants—must be considered somewhat tentative in nature. It may be the case that these results are reflective of either inaccurate measurement of certain problems or of inapplicability of certain concepts within the American Indian sample. Further research will be necessary in order to better understand these issues.

A second concern arises because the two ethnic groups did appear to differ across a number of demographic variables related to risk for the development of psychopathology, with the American Indian youth at higher risk. This is consistent with previous research and is reflective of the more challenging social conditions of American Indian youth—even those living in the same communities as Caucasian youth. Given these differences, what is perhaps most surprising is the extent to which certain comparisons across the different informants did not reveal differences. Again it is necessary to consider the possibility that the lack of differences is related to psychometric issues. Moreover, a closer examination of the relationship in these two ethnic groups between risk and protective factors, on one hand, and psychosocial functioning, on the other, appears warranted.

A third concern is that although it was extremely important to the architects of this project to utilize an active consent process on the part of the parents, this process did result in lower participation rates in general

than would have been ideal. Moreover, the limited participation of parents in completing the questionnaire does weaken the study from a methodological perspective. Although parents' reports were generally more similar to the youths' reports than to those of the teachers, this may be the result of parents of the more troubled youth not participating in the study. Future research must increase parental participation rates to be closer to the rates of youth and teachers. This might be accomplished by using in-person solicitation of participation rather than phone contact to parents who had not yet agreed to participate. In addition, advance notice of the study being conducted, the source of the research questions (i.e., the tribe, rather than outside academicians), and the potential benefits of participation might help to improve participation rates.

A fourth concern involves the lack of information about the youth who were approached but did not participate in the study and also the youth who were unable to participate because they had dropped-out of or were not attending school at the time the data were collected. Compared to the youth in the sample, the risks faced by many of those not included may be considerably higher. Although examination of high-risk youth as a specific group is beyond the scope of this study, additional work remains to be done to understand the needs and differences of American Indian and Caucasian youth who have become disengaged from the educational system.

A final, more general caution: This research was designed to be only the first step in a potentially lengthy process. The results we present here provide important information for the next step, which is the design of preventive interventions, but they in no way tell the whole story. Much work remains to be done: (a) to understand how factors of strength and resiliency that are so apparent among many youth in American Indian communities buffer against psychosocial risks and the vagaries of the educational system; (b) to design measures that are more culturally sensitive than those used here to assess problem behaviors; (c) to develop positive collaborations between interventionists and tribal communities; (d) to empower community members to carry out this work on their own; and (e) to assess the efficacy of the interventions that are designed using sound empirical techniques.

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